

Aviation Industry Safety Update

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Introduction

This report uses calendar years; the first quarter is 1 January to 31 March.

Data in tables may not sum exactly to the total shown due to rounding.

Occurrence Statistics

The “Three Year Moving Average” graphs in the Occurrence Statistics sections give an indication of the levels of safety failure in New Zealand aviation during the period 1 January 2007 to 31 December 2009. They are constructed from data in the Civil Aviation Authority Management Information System, and use actual data reported to the CAA.

Industry Activity Statistics

Registered Aircraft

The following table summarises the number of aircraft on the register by Aircraft Category at 31 December 2009 and 6 months prior:

Aircraft Category	30 Jun 2009		31 Dec 2009		Change	
	Number	Percent	Number	Percent	Number	Percent
Large Aeroplanes	120	2.7	118	2.7	- 2	- 1.7
Medium Aeroplanes	80	1.8	84	1.9	4	5.0
Small Aeroplanes	1,510	34.3	1,502	34.0	- 8	- 0.5
Agricultural Aeroplanes	118	2.7	118	2.7	0	0
Helicopters	752	17.1	760	17.2	8	1.1
Sport Aircraft	1,826	41.4	1,833	41.5	7	0.4
Total	4,406		4,415		9	0.2

Licences

The following table summarises the number of recreational pilot, private pilot, commercial pilot, airline transport pilot, air traffic controller, and aircraft maintenance engineer licences on the register at 31 December 2009 and 6 months prior:

Licence Type (Medical Certificate)	30 Jun 2009	31 Dec 2009	Change	
			Number	Percent
RPL (RPL Medical)	103	133	30	29.1
PPL (Class 1 & 2)	3,799	3,829	30	0.8
CPL (Class 2 only)	1,909	1,969	60	3.1
CPL (Class 1)	2,300	2,359	59	2.6
ATPL (Class 2 only)	893	976	83	9.3
ATPL (Class 1)	1,152	1,068	- 84	- 7.3
ATCL (Class 3)	345	363	18	5.2
LAME (N/A)	2,378	2,424	46	1.9
Total Licences	12,879	13,121	242	1.9

Note — the statistics above for pilot licences count only those with active class 1 or active class 2 medical certificates or, for RPL holders, a certificate, issued in accordance with the NZTA medical fitness standards that are applicable for a Class 2, 3, 4 or 5 driver licence with passenger endorsement. This means that for CPL and ATPL licences, the number with a class 2 medical only, must only be exercising PPL privileges (or not flying at all). The statistics for ATCL holders count only those with an active class 3 medical certificate. These statistics do not show the number of licence holders as each client may hold more than one licence.

Certificated Operators

The following tables show the number of Civil Aviation Rule Part certificate holders at 31 December 2009 and 6 months prior.

Rule part	30 Jun 2009	31 Dec 2009	Change	
			Number	Percent
Part 109 Regulated Air Cargo Agent	55	62	7	12.7
Part 119 Air Operator	182	184	2	1.1
Part 119 Air Operator - Pacific	1	1	0	0
Part 129 Foreign Air Operator	40	38	-2	-5.0
Part 137 Agricultural Aircraft Operator	108	107	-1	-0.9
Part 139 Aerodromes	26	25	-1	-3.8
Part 140 Aviation Security Service	1	1	0	0
Part 141 Aviation Training Organisation	53	55	2	3.8
Part 141 Restricted Training Organisation	0	0	0	-
Part 145 Aircraft Maintenance Organisation	55	57	2	3.6
Part 146 Aircraft Design Organisation	10	11	1	10.0
Part 148 Aircraft Manufacturing Organisation	21	21	0	0
Part 149 Aviation Recreation Organisation	9	9	0	0
Part 171 Aeronautical Telecommunication Service Organisation	2	2	0	0
Part 172 Air Traffic Service	1	2	1	100.0
Part 173 Instrument Flight Procedure Organisation	1	3	2	200.0
Part 174 Meteorological Service Organisation	2	2	0	0
Part 175 Aeronautical Information Service Organisation	2	2	0	0
Part 19 Supply Organisation Certificate of Approval	61	59	-2	-3.3
Part 92 Dangerous Goods Packaging Approval	46	57	11	23.9

Note: The figures show the total number of approvals held by organisations with Part 92 certificates.

119 Air Operator	31 Dec 2008	30 Jun 2009	Change	
			Number	Percent
Part 108 Security Programme	19	18	-1	-5.3
Part 121 Large Aeroplanes	9	10	1	11.1
Part 125 Medium Aeroplanes	15	15	0	0
Part 135 Helicopters and Small Aeroplanes	163	171	8	4.9

119 Air Operator Pacific	30 Jun 2009	31 Dec 2009	Change	
			Number	Percent
Part 108 Security Programme	1	1	0	0
Part 121 Large Aeroplanes	1	1	0	0
Part 125 Medium Aeroplanes	1	1	0	0
Part 135 Helicopters and Small Aeroplanes	1	1	0	0

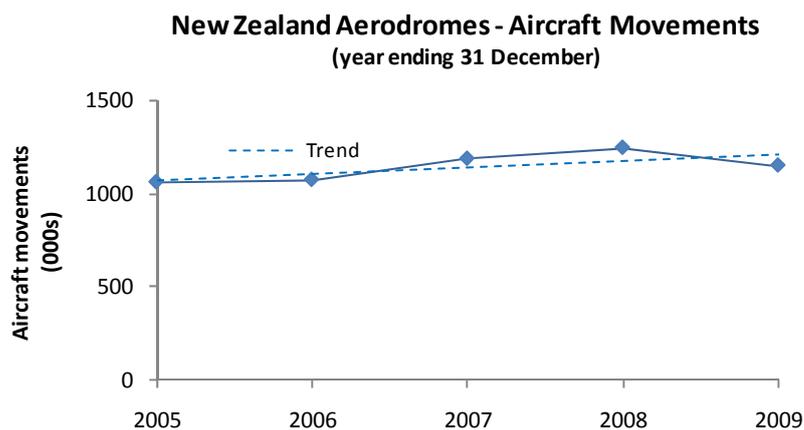
129 Foreign Air Operator	30 Jun 2009	31 Dec 2009	Change	
			Number	Percent
Part 108 Security Programme	30	28	-2	-6.7

Aircraft Movements

The following graph and table show the number of aircraft movements at the following aerodromes: Auckland, Christchurch, Dunedin, Gisborne, Hamilton, Invercargill, Milford Sound, Napier, Nelson, New Plymouth, Ohakea, Palmerston North, Queenstown, Rotorua, Taupo, Tauranga, Wellington, Whenuapai and Woodbourne.

Long-Term Change in Aircraft Movements

The following graph shows the number of aircraft movements for the five-year period 1 January 2005 to 31 December 2009.



The average annual increase in the number of aircraft movements has been 2.0% from the year ended 31 December 2005 until the year ended 31 December 2009 during which 1,149,977 movements were recorded.

Six-Monthly Comparison

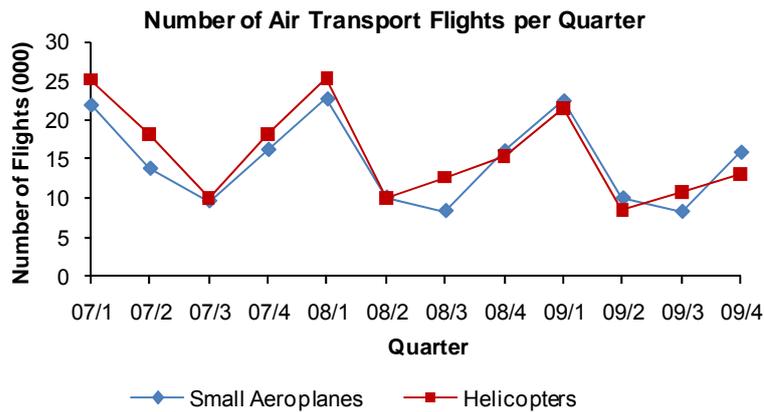
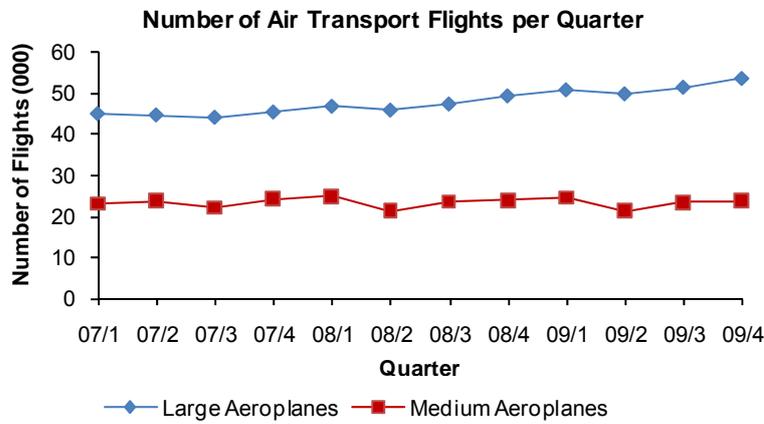
Number of Aircraft Movements

Activity	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change	
			Number	Percent
Aircraft Movements	598,719	552,668	- 46,051	- 7.7

Air Transport Flights

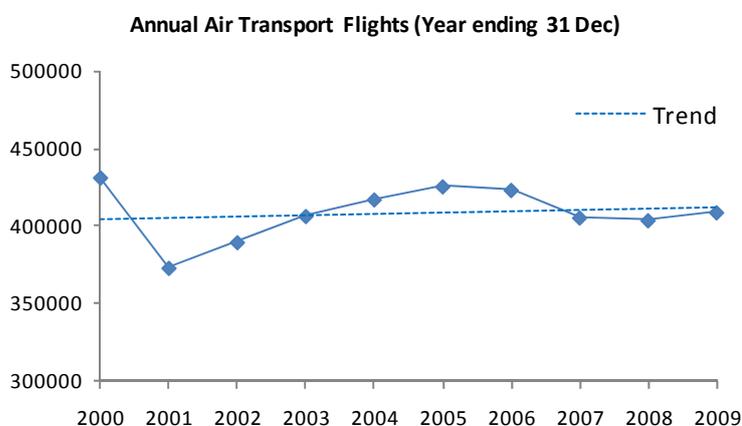
Note that these graphs exclude the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes, and foreign registered aircraft that are operated in New Zealand.

The following graphs show the number of air transport flights per quarter during the three year period 1 January 2007 to 31 December 2009.



Long-Term Change in Air Transport Flights

The following graph shows the number of air transport flights (includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes) for the 10-year period 1 January 2000 to 31 December 2009.



The change in the number of annual air transport flights between the years ended 31 December 2000 and 31 December 2009 was equivalent to an annual decrease of 0.6%.

Six-Monthly Comparison

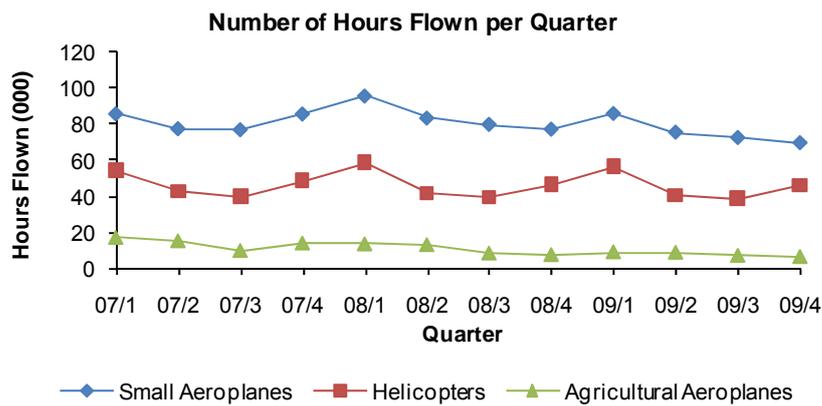
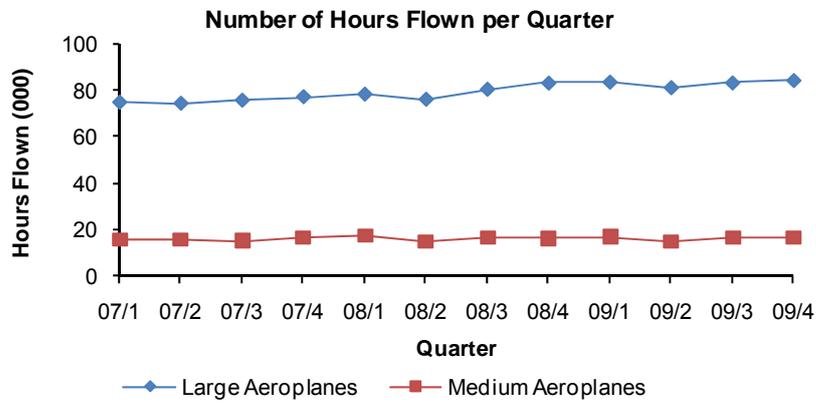
Number of Air Transport Flights

Aircraft Category	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change	
			Number	Percent
Large Aeroplanes	96,439	104,881	8,442	8.8
Medium Aeroplanes	47,472	46,978	- 494	- 1.0
Small Aeroplanes	24,493	24,223	- 270	- 1.1
Helicopters	28,118	23,847	- 4,271	- 15.2
Sport Aircraft (Aeropl, FB, Helo only)	131	78	- 53	- 40.1
Total	196,653	200,007	3,354	1.7

Hours Flown

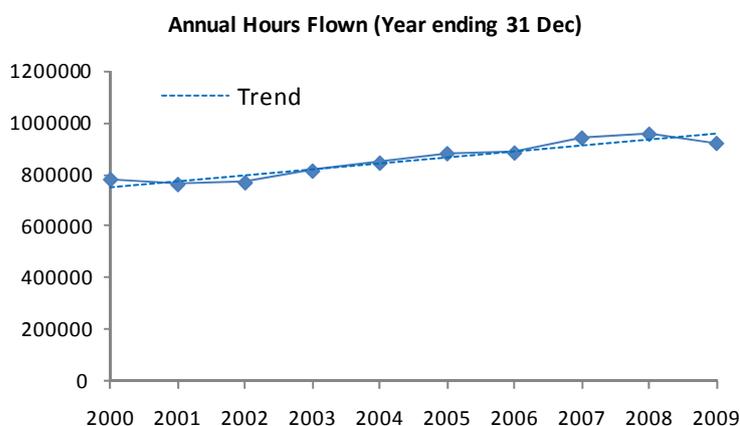
Note that these graphs exclude the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes, and foreign registered aircraft that are operated in New Zealand.

The following graphs show the number of hours flown by aircraft during the three-year period 1 January 2007 to 31 December 2009.



Long-Term Change in Hours Flown

The following graph shows the number of hours flown (includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes) for the 10-year period 1 January 2000 to 31 December 2009.



The change in the number of annual hours flown between the years ended 31 December 2000 and 31 December 2009 from 781,793 to 920,388 was equivalent to an annual increase of 1.8%

Six-Monthly Comparison

Number of Hours Flown by Safety Target Group

Aircraft Category	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change	
			Number	Percent
Airline Operations - Large Aeroplanes	163,943	167,806	3,863	2.4
Airline Operations - Medium Aeroplanes	32,778	32,618	- 160	- 0.5
Airline Operations - Small Aeroplanes	18,203	16,265	- 1,939	- 10.6
Airline Operations - Helicopter	27,640	27,620	- 19	- 0.1
Sport Transport (Aeropl, FB, Helo only)	350	250	- 100	- 28.6
Other Commercial Operations - Aeroplane	124,077	113,540	- 10,536	- 8.5
Other Commercial Operations - Helicopter	22,975	20,884	- 2,090	- 9.1
Agricultural Operations - Aeroplane	14,463	12,403	- 2,060	- 14.2
Agricultural Operations - Helicopter	26,000	26,905	906	3.5
Agricultural Operations - Sport	0	0	0	-
Private Operations - Aeroplane	16,949	14,197	- 2,752	- 16.2
Private Operations - Helicopter	9,949	9,741	- 208	- 2.1
Private Operations - Sport (Aeropl, FB, Helo only)	1,291	1,279	- 13	- 1.0
Total	458,618	443,510	- 15,108	- 3.3

Industry Size and Shape

The following table shows the size and shape of the aviation industry as determined from Aircraft Operating Statistics in the relevant 2010 Safety Target Group categories for the period 1 January 2009 to 31 December 2009. For each Safety Target Group the total number of hours flown is multiplied by the average number of seats and the appropriate load factor, to give the number of seat hours utilised by the group (person exposure). For Safety Target Groups that are not predominantly passenger carrying a surrogate of 500 kg of aircraft weight is used instead of seat hours.

Aircraft Category	Average No. Of seats	Seat Hours Offered (000's)	Percent seat hours
Airline Operations - Large Aeroplanes	199.00	48352	96.2
Airline Operations - Medium Aeroplanes	20.59	794	1.6
Airline Operations - Small Aeroplanes	3.89	95	0.2
Airline Operations - Helicopter	3.60	139	0.3
Sport Transport *		122	0.2
Other Commercial Operations - Aeroplane	2.00	233	0.5
Other Commercial Operations - Helicopter	3.60	81	0.2
Agricultural Operations - Aeroplane	2.00	32	0.1
Agricultural Operations - Helicopter	3.60	103	0.2
Agricultural Operations - Sport *			
Private Operations - Aeroplane	2.00	48	0.1
Private Operations - Helicopter	3.60	54	0.1
Private Operations - Sport *		206	0.4

* most sport aircraft do not report hours or seats, so a standard estimate of seat hours offered is used as well as reported data for such aircraft in these groups.

Note that the percentages may not sum exactly to 100.0% due to rounding.

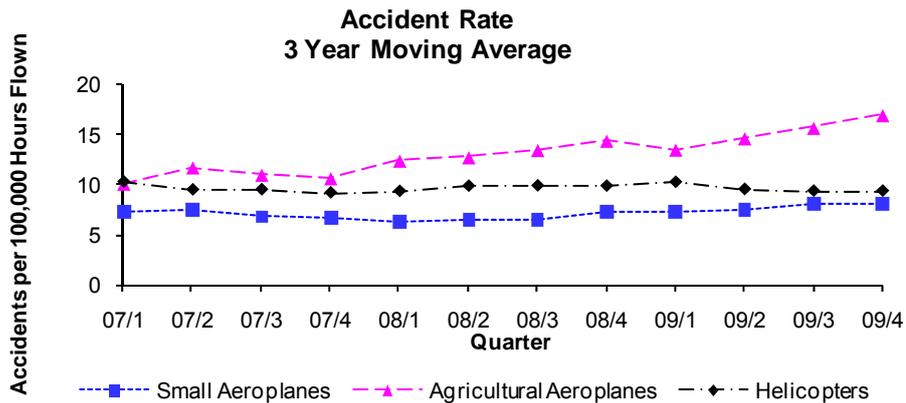
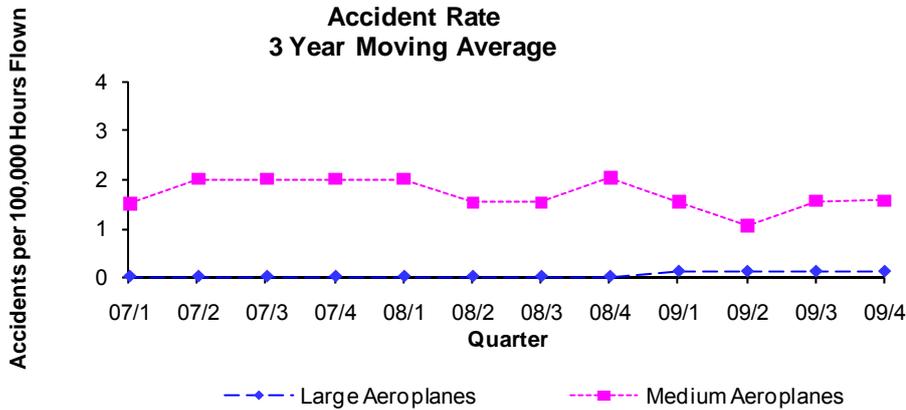
This table shows that around 96.2% of seat hours are offered by the Airline Operations – Large Aeroplanes group, around 1.6% by the Airline Operations – Medium Aeroplanes group, with the remaining 2.2% of seat hours offered being split between the other safety target groups.

Occurrence Analysis

Aircraft Accidents

Occurrence Trend

The following graphs show the aircraft accident rates (accidents per 100,000 hours flown) three year moving average for the three-year period 1 January 2007 to 31 December 2009 (excluding the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes).



Aircraft Category	Straight Line Trend of 3 year moving Average
Large Aeroplanes	Constant
Medium Aeroplanes	Constant
Small Aeroplanes	Constant
Agricultural Aeroplanes	Trending up
Helicopters	Constant

Long-Term Accident Rate

The following graph shows the overall accident rate per 100,000 hours flown (includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes) for the 10-year period 1 January 2000 to 31 December 2009.



Note that this graph does not show a moving average.

Six-Monthly Comparison

Number of Aircraft Accidents

Activity	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	1	1	0
Small Aeroplanes	17	15	- 2
Agricultural Aeroplanes	5	2	- 3
Helicopters	12	10	- 2
Sport Aircraft (excluding hang gliders and parachutes)	18	21	3
Hang Gliders	3	10	7
Parachutes	1	3	2
Unknown	1	0	- 1
Total	58	62	4

Severity

Activity	Severity	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change
Large Aeroplanes	Critical	0	0	0
	Major	0	0	0
	Minor	0	0	0
Medium Aeroplanes	Critical	0	1	1
	Major	1	0	-1
	Minor	0	0	0
Small Aeroplanes	Critical	3	6	3
	Major	12	8	-4
	Minor	2	1	-1
Agricultural Aeroplanes	Critical	2	1	-1
	Major	1	1	0
	Minor	2	0	-2
Helicopters	Critical	3	3	0
	Major	8	7	-1
	Minor	1	0	-1
Sport Aircraft (excluding hang gliders and parachutes)	Critical	0	12	12
	Major	17	8	-9
	Minor	1	1	0
Hang Gliders	Critical	2	2	0
	Major	1	5	4
	Minor	0	3	3
Parachutes	Critical	0	1	1
	Major	0	1	1
	Minor	1	1	0
Unknown	Critical	0	0	0
	Major	0	0	0
	Minor	1	0	-1
Total	Critical	10	26	16
	Major	40	30	-10
	Minor	8	6	-2

Safety Outcome Targets for 2010

Safety Target Structure

The 2010 Safety Targets have all New Zealand aviation classified under three broad group headings: Public Air Transport, Other Commercial Operations, and Non-commercial Operations.

Thirteen further sub-groups enable differentiation between aeroplanes, helicopters, and sport aircraft, and also allow for different weight groups. A diagram of the grouping is shown in the Definitions section.

Each target group has its own target level expressed as social cost per unit of passenger exposure, the unit being per seat hour. For target groups that are not predominantly passenger carrying a surrogate of 500 kg of aircraft weight is used instead of passenger exposure. These outcomes represent the maximum level of social cost considered acceptable for each group.

The table below shows the Safety Outcomes (in dollars per seat-hour) for the three year period ending 31 December 2009 (including the cost of aircraft destroyed). Target groups highlighted in yellow are groups where major safety improvements need to be achieved. Red outlining has been used to draw attention to groups with significant recent safety failure.

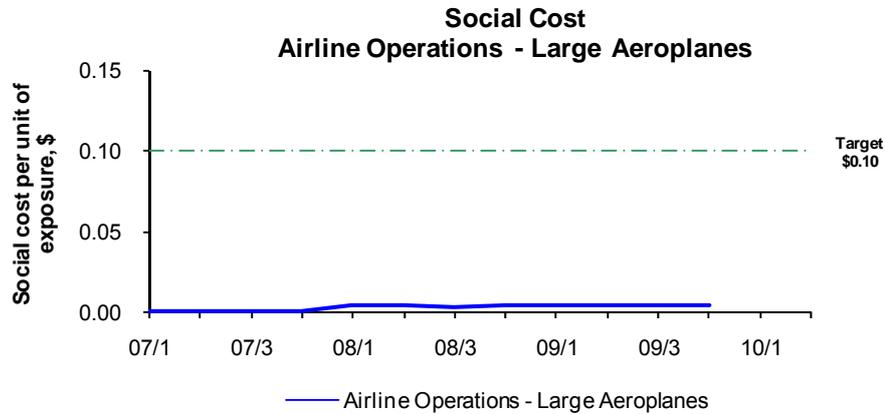
Safety Outcome Target Group	Current Estimate \$	Target \$
Airline Operations - Large Aeroplanes	0.00	0.1
Airline Operations - Medium Aeroplanes	0.02	0.1
Airline Operations - Small Aeroplanes	1.92	6.5
Airline Operations - Helicopter	8.21	6.5
Sport Transport	59.37	13.0
Other Commercial Operations - Aeroplane	30.54	6.5
Other Commercial Operations - Helicopter	52.83	6.5
Agricultural Operations - Aeroplane	80.99	14.0
Agricultural Operations - Helicopter	8.34	14.0
Agricultural Operations - Sport Aircraft	0.00	28.0
Private Operations - Aeroplane	30.00	10.0
Private Operations - Helicopter	31.45	10.0
Private Operations - Sport	100.91	20.0

Current Estimate:

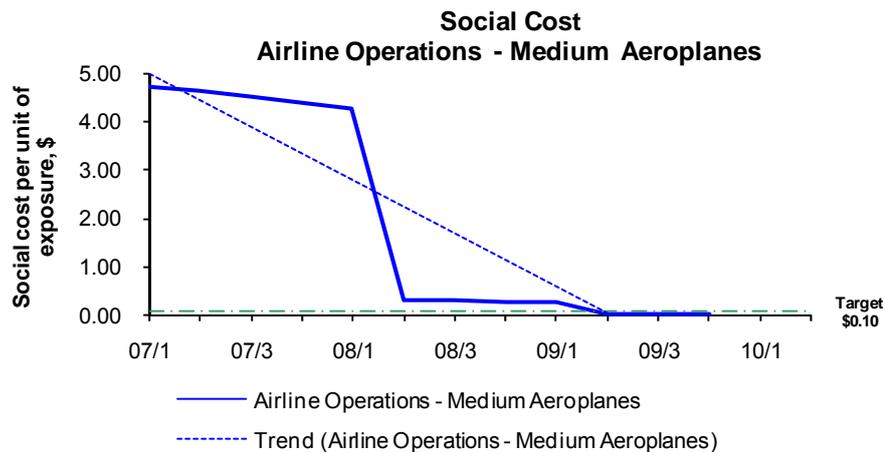
This is the estimated social cost of injuries and aircraft destroyed per seat hour for the three year period ending 31 December 2009. Note: Aviation Safety reports prior to 2008 July to December used a 10 year averaging period for large and medium aeroplanes and a one year period for all others.

Safety Target Graphs

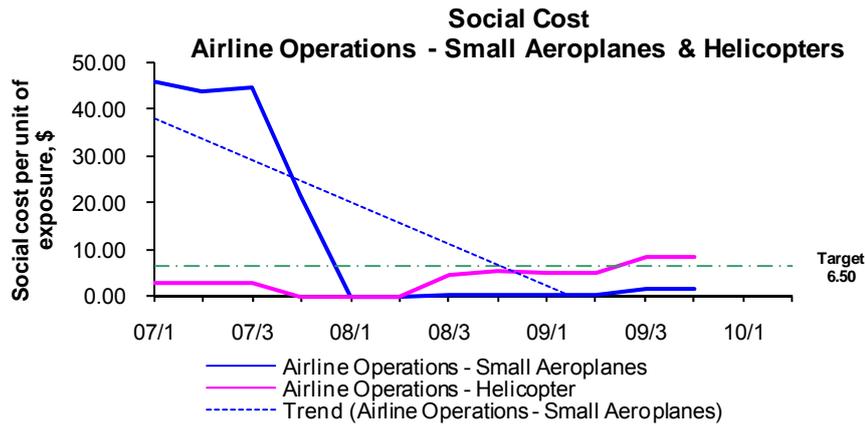
Graphs displaying the Safety Outcome Targets derived using 3 year averages and the progress over each quarter are shown on this and the following pages.



The outcome for Airline Operations – Large Aeroplanes has remained well below the target level of \$0.10 per seat hour of exposure since late 2006. There is no discernable trend either up or down. There were 1 serious and 6 minor injuries reported in this group during the period January 2007 to December 2009.

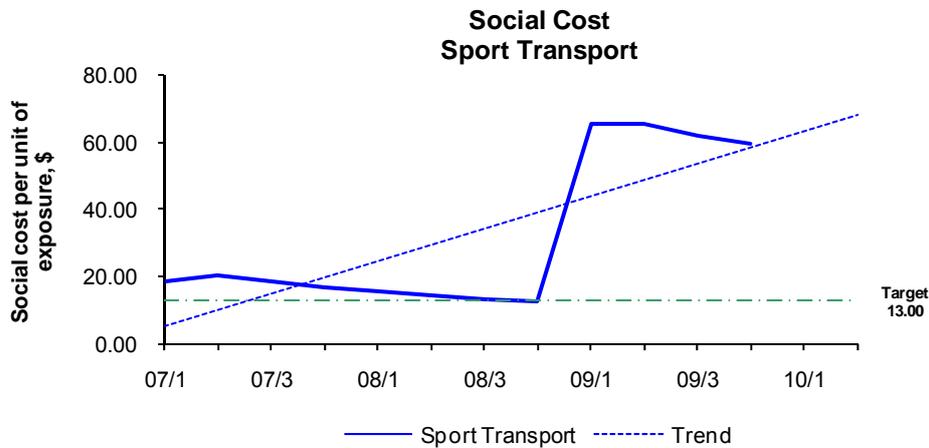


The outcome for Airline Operations – Medium Aeroplanes has now dropped below the target and is trending down. There were 3 minor injuries reported in this group during the period January 2007 to December 2009.



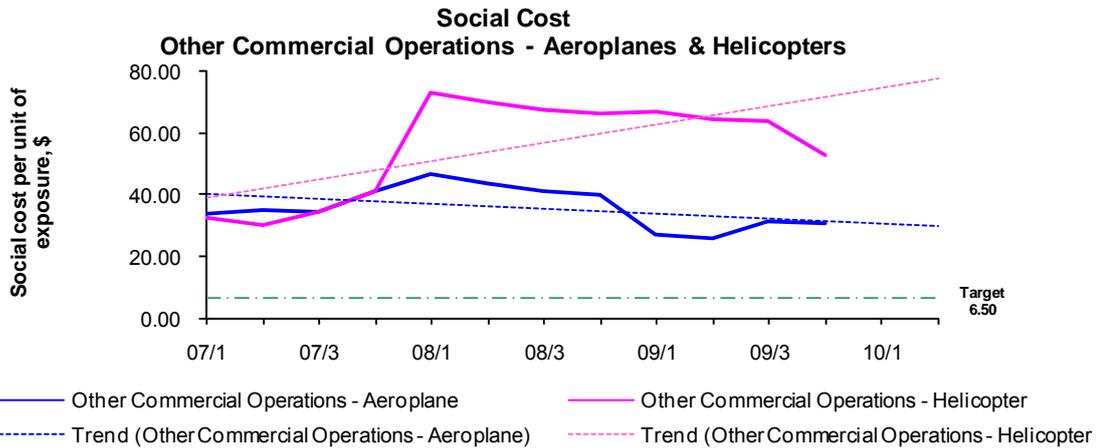
The outcome for Airline Operations – Small Aeroplanes shows a significant long term downward trend from the high starting point of \$46.09 per seat-hour of exposure in the three years to March 2007. The safety outcome for this group has been below the target level since the January to March 2008 quarter. There were 1 serious and 3 minor injuries reported in this group during the period January 2007 to December 2009.

The outcome for Airline Operations – Helicopter has now just exceeded the target level which it has been below since the second quarter of 2006. A small upward trend is evident. There were 2 serious and 4 minor injuries reported in this group during the period January 2007 to December 2009.



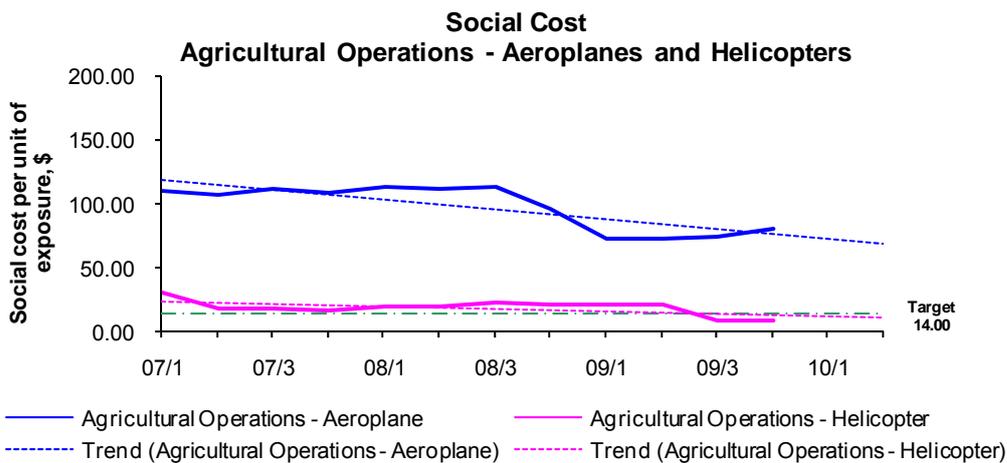
Two hang glider, two microlight and one glider fatalities during the first quarter of 2009 contributed to a significant increase in the upward trend displayed by this group. There were 5 fatal, 10 serious and 8 minor injuries reported in this group during the period January 2007 to December 2009.

Note that this group includes hang gliders and parachutes used on transport operations.



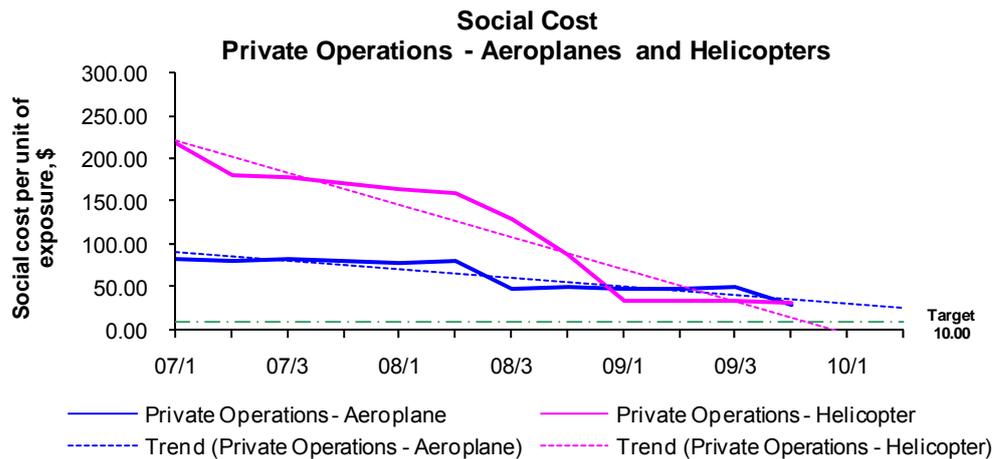
The outcome for Other Commercial Operations – Aeroplane remains above the target of \$6.50. The steady downward trend is small. There were 5 fatal, 3 serious and 2 minor injuries reported in this group during the period January 2007 to December 2009.

The outcome for Other Commercial Operations – Helicopter again turned sharply upwards during the first quarter of 2008 and remains well above the target level. There were 2 fatal, 1 serious and 4 minor injuries reported in this group during the period January 2007 to December 2009.



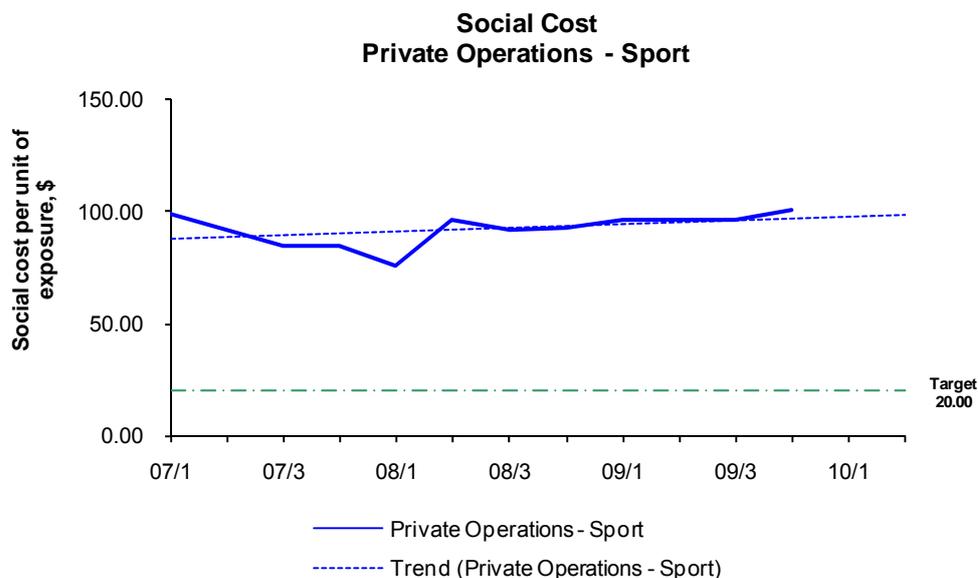
The outcome for Agricultural Operations – Aeroplanes is well above the target level of \$14.00. There were 2 fatal, 1 serious and 1 minor injuries reported in this group during the period January 2007 to December 2009.

The outcome for Agricultural Operations – Helicopter is below the target level. There were 1 serious and 2 minor injuries reported in this group during the period January 2007 to December 2009.



The outcome for Private Operations – Aeroplanes has been trending down since late 2005. There were 1 fatal, 3 serious and 4 minor injuries reported in this group during the period January 2007 to December 2009.

The outcome for Private Operations – Helicopters has been trending down since early 2006. There were 1 fatal and 7 minor injuries reported in this group during the period January 2007 to December 2009.

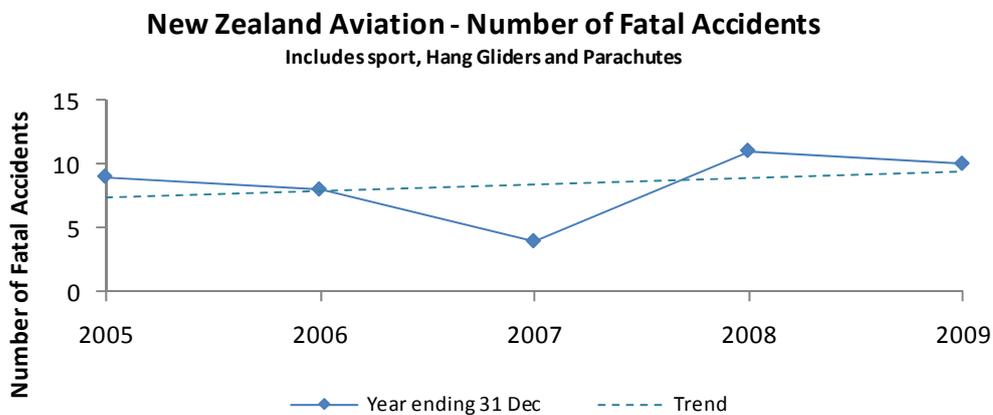


The outcome for Private Operations – Sport is trending upwards. There were 15 fatal, 23 serious and 19 minor injuries reported in this group during the period January 2007 to December 2009.

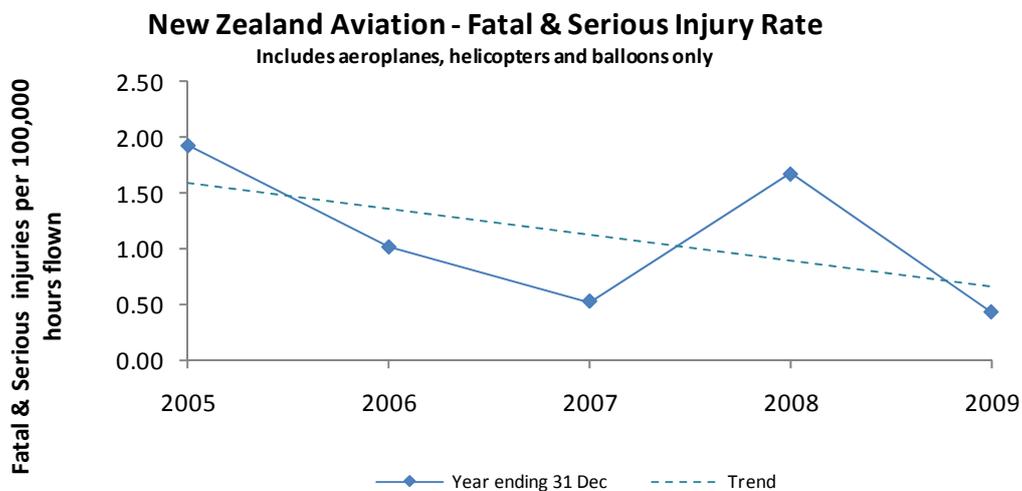
Note that this group includes hang gliders and parachutes used on private operations.

Injury Accidents

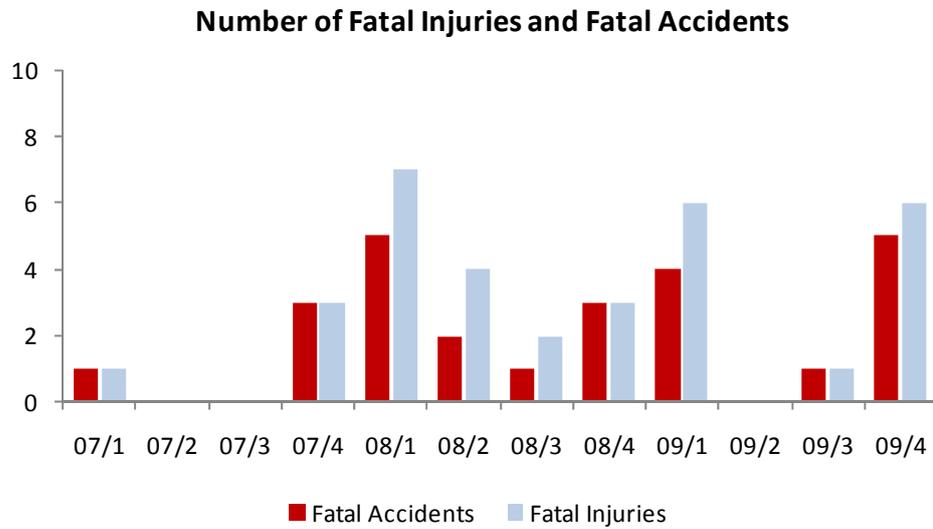
The following graph shows the number of fatal accidents in the 5-year period to 31 December 2009 (including the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes).



The following graph shows the overall fatal and serious injury rate per 100,000 hours flown (includes the aircraft classes aeroplane, helicopter and balloon only; excludes other aircraft classes, hang gliders and parachutes) for the 5-year period to 31 December 2009.



The following graph shows the number of fatal injuries and fatal accidents (including the aircraft statistics categories Sport Aircraft, Hang Gliders and Parachutes) for the three-year period to 31 December 2009.



The long-term trend of the number of fatal accidents is slightly upwards and that of the number of fatal injuries is downward but since mid 2007 these trends have flattened out to become approximately constant.

Six-Monthly Comparison

Number of Fatal Accidents and Number of Fatal Injuries

Activity	1 Jul to 31 Dec 2008		1 Jul to 31 Dec 2009		Change	
	Fatal Accidents	Fatal Injuries	Fatal Accidents	Fatal Injuries	Fatal Accidents	Fatal Injuries
Large Aeroplanes	0	0	0	0	0	0
Medium Aeroplanes	0	0	0	0	0	0
Small Aeroplanes	1	2	2	2	1	0
Agricultural Aeroplanes	1	1	0	0	-1	-1
Helicopters	1	1	0	0	-1	-1
Sport Aircraft	0	0	3	4	3	4
Hang Gliders	1	1	1	1	0	0
Parachutes	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
Total	4	5	6	7	2	2

Number of Serious Injuries

Activity	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	0	0
Small Aeroplanes	3	1	-2
Agricultural Aeroplanes	0	0	0
Helicopters	3	0	-3
Sport Aircraft	5	1	-4
Hang Gliders	1	2	1
Parachutes	1	1	0
Unknown	0	0	0
Total	13	5	-8

Number of Minor Injuries

Activity	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change
Large Aeroplanes	0	0	0
Medium Aeroplanes	0	3	3
Small Aeroplanes	2	3	1
Agricultural Aeroplanes	0	1	1
Helicopters	5	5	0
Sport Aircraft	2	3	1
Hang Gliders	1	3	2
Parachutes	0	0	0
Unknown	0	0	0
Total	10	18	8

Flight Phase

The following table shows the flight phase recorded for accidents.

Flight Phase	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change
AEROBATICS	0	0	0
AGRICULTURAL MANOEUVRES	1	3	2
APPROACH	4	4	0
CIRCUIT	1	0	- 1
CLIMB	4	1	- 3
CRUISE	8	7	- 1
DESCENT	1	2	1
HOLDING	0	0	0
HOVER	1	2	1
HOVER TAXI	0	0	0
LANDING	23	19	- 4
PARKED	4	0	- 4
TAKEOFF	7	13	6
TAXIING	1	1	0
UNKNOWN	1	1	0

Accidents in the period 1 July to 31 December 2009 were most common during the Landing phase (36%).

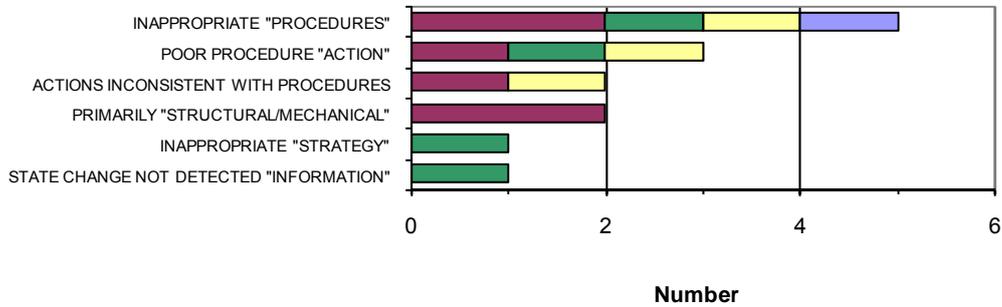
Analysis of recorded occurrence descriptors for Landing phase accidents in the 1 July to 31 December 2009 period shows that the most common descriptor is 'Hard Landing' (14%).

Analysis of recorded causes for Landing phase accidents shows that the most common cause is 'Active Failure - Inappropriate Strategy' (27%).

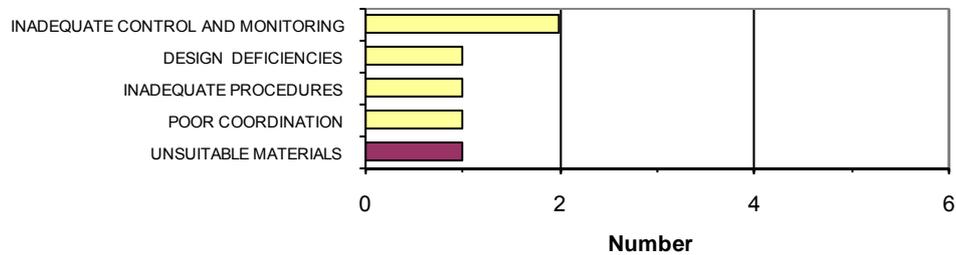
Accident Causal Factors by Aircraft Category

The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 July to 31 December 2008 for the various aircraft statistics categories. Causal factors have been assigned to 21 (36%) of the 58 accidents.

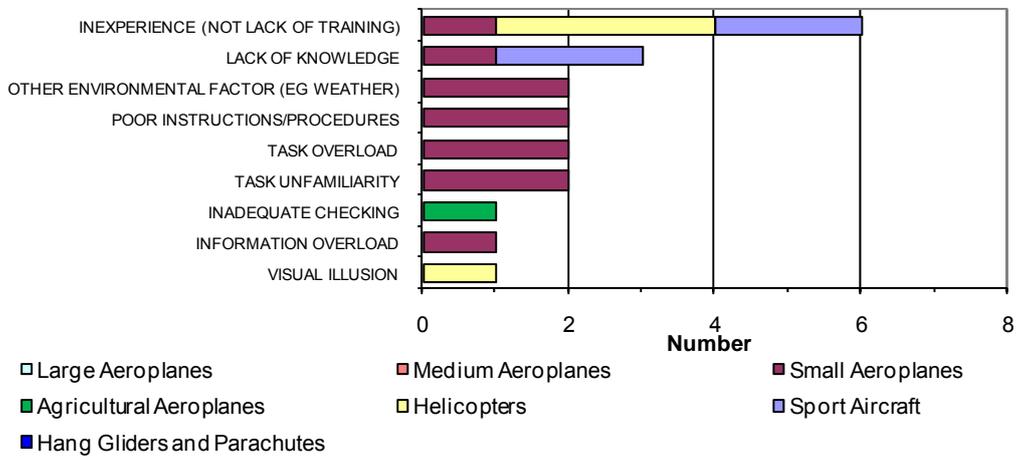
Active Failure Factors



Organisation Factors

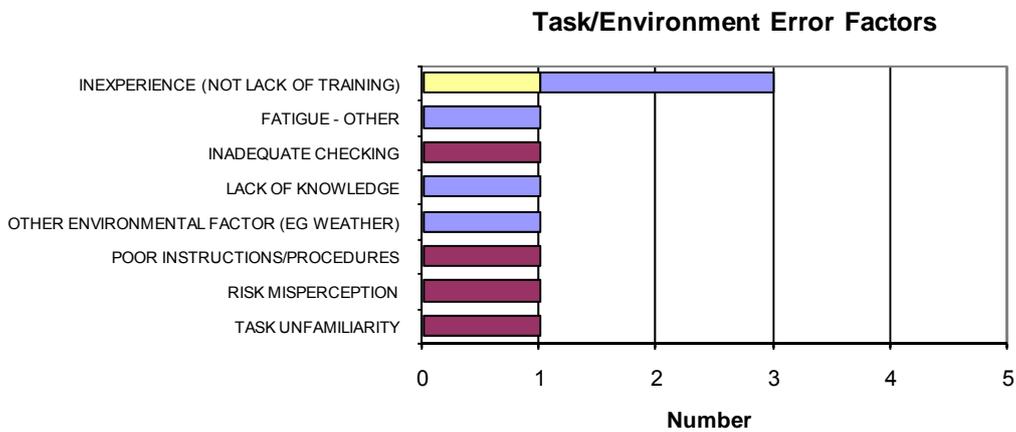
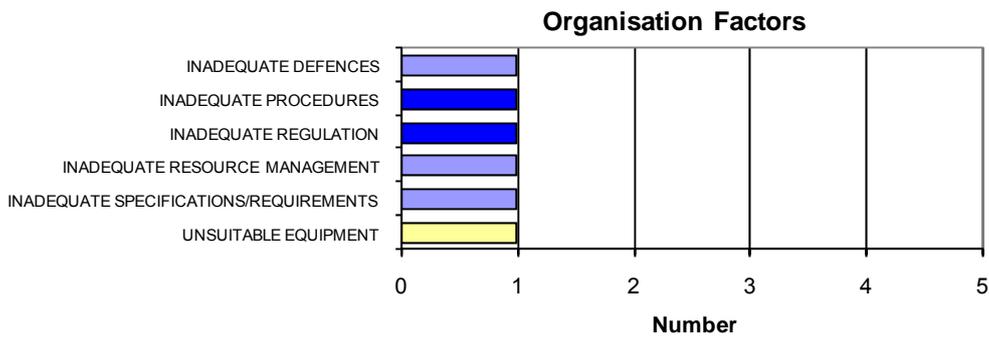
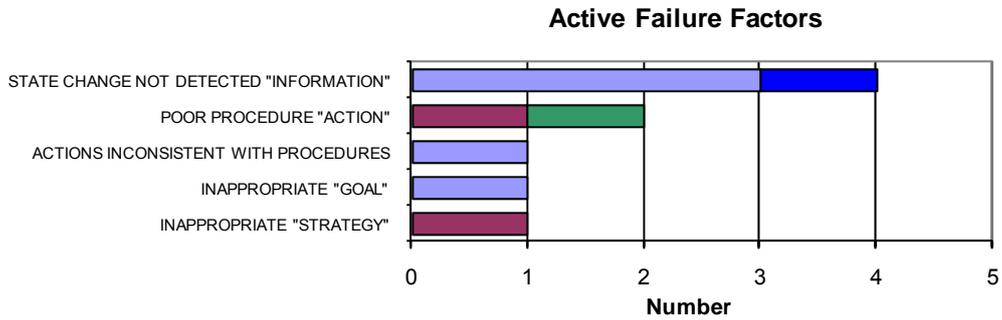


Task/Environment Error Factors



- Large Aeroplanes
- Small Aeroplanes
- Agricultural Aeroplanes
- Helicopters
- Hang Gliders and Parachutes
- Medium Aeroplanes
- Sport Aircraft

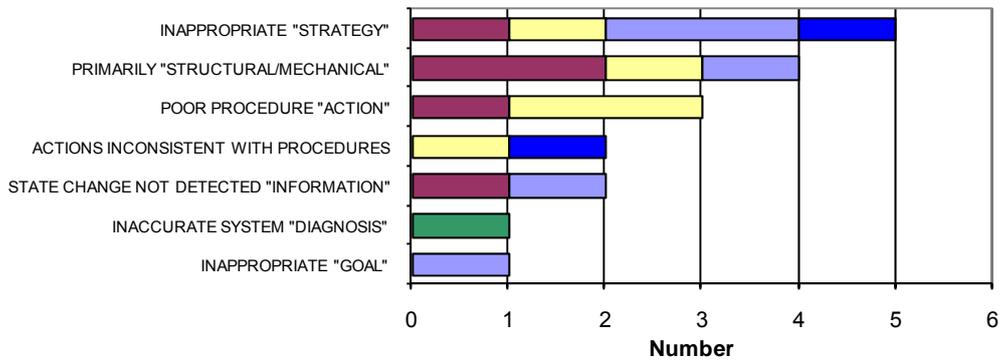
The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 January to 30 June 2009 for the various aircraft statistics categories. Causal factors have been assigned to 19 (34%) of the 56 accidents.



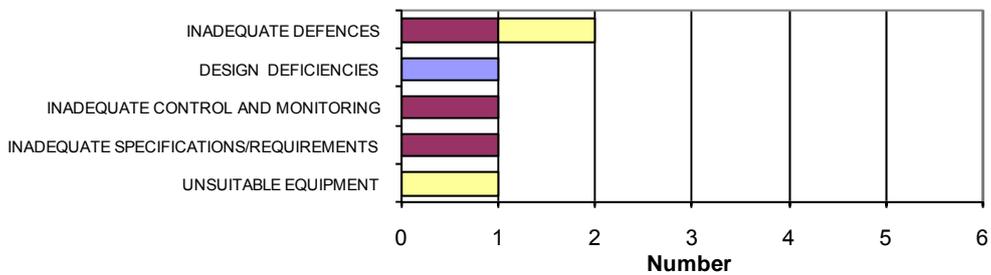
- Large Aeroplanes ■ Medium Aeroplanes ■ Small Aeroplanes
- Agricultural Aeroplanes □ Helicopters □ Sport Aircraft
- Hang Gliders and Parachutes

The following graphs show the number of causal factors recorded for accidents that occurred during the 6-month period 1 July to 31 December 2009 for the various aircraft statistics categories. Causal factors have been assigned to 32 (52%) of the 62 accidents.

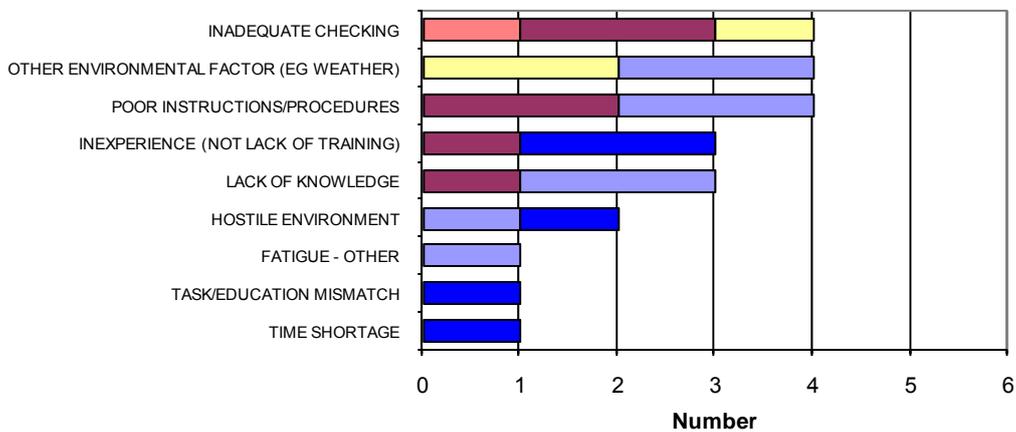
Active Failure Factors



Organisation Factors



Task/Environment Error Factors

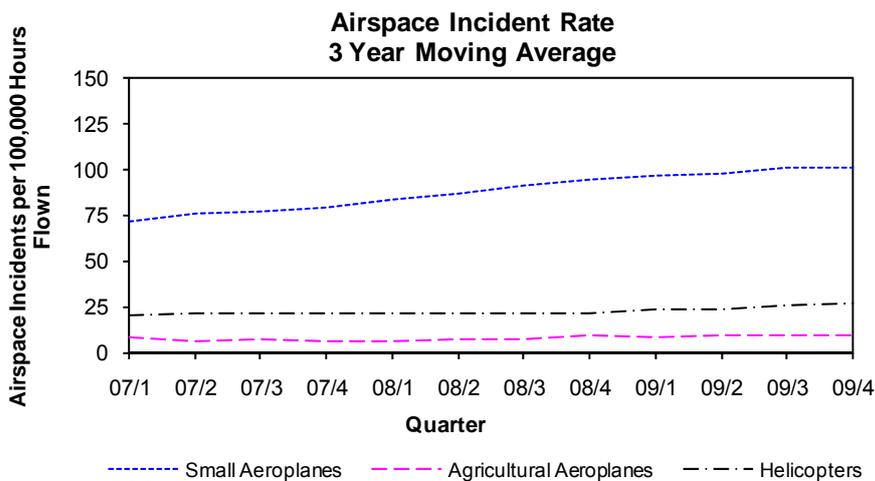
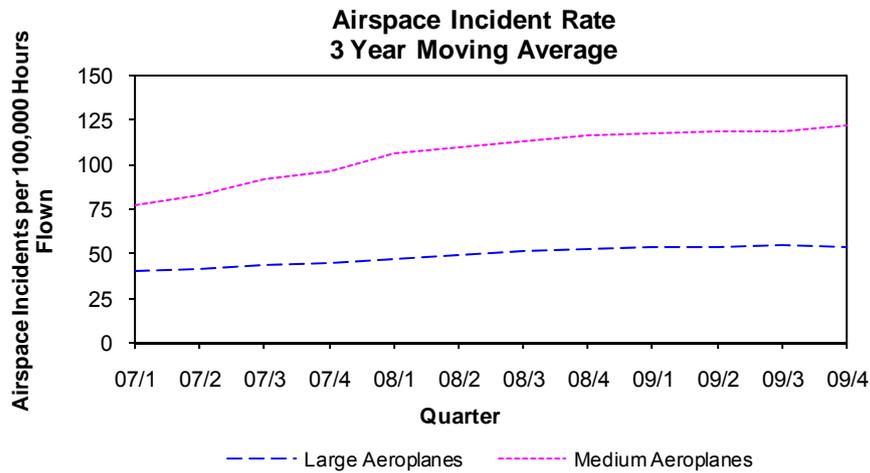


- Large Aeroplanes
- Medium Aeroplanes
- Small Aeroplanes
- Agricultural Aeroplanes
- Helicopters
- Sport Aircraft
- Hang Gliders and Parachutes

Airspace Incidents

Occurrence Trend

The following graphs show the reported airspace incident rates (incidents per 100,000 hours flown) three year moving average for the three-year period 1 January 2007 to 31 December 2009 (excluding Sport). The graphs do not differentiate between incidents that are pilot or ATS attributable.



Aircraft Category	Straight line trend of 3 Year moving average
Large Aeroplanes	Trending up
Medium Aeroplanes	Trending up
Small Aeroplanes	Trending up
Helicopters	Trending up
Agricultural Aeroplanes	Trending up

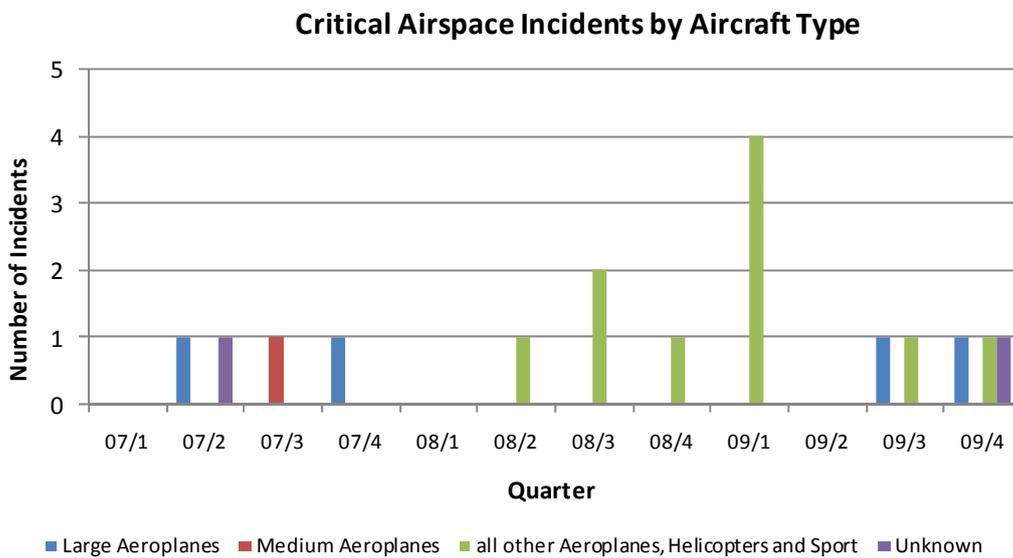
Six-Monthly Comparison

Number of Reported Airspace Incidents

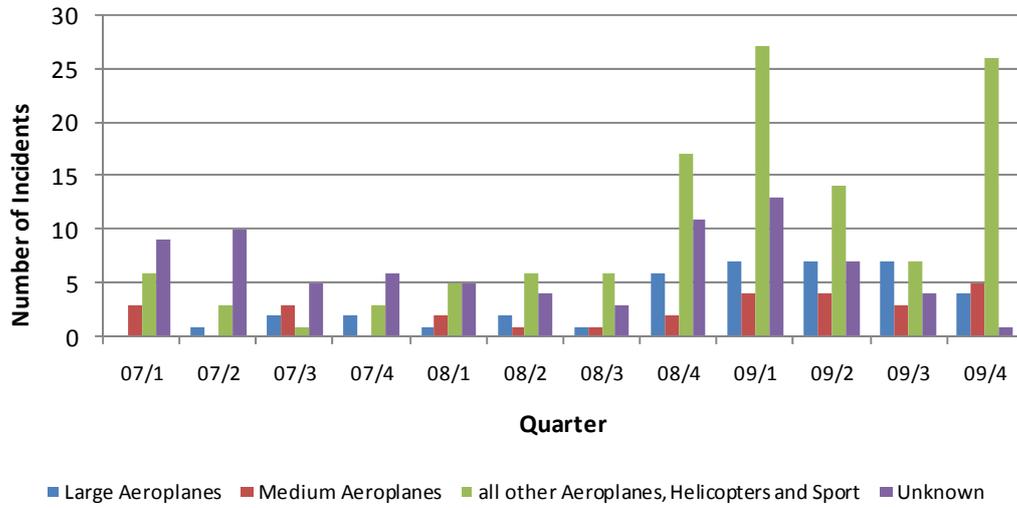
Aircraft Category	1 Jul to	1 Jul to	Change	
	31 Dec 2008	31 Dec 2009	Number	Percent
Large Aeroplanes	90	95	5	5.6
Medium Aeroplanes	40	34	- 6	- 15.0
Small Aeroplanes	167	145	- 22	- 13.2
Agricultural Aeroplanes	3	2	- 1	- 33.3
Helicopters	26	28	2	7.7
Sport Aircraft	13	19	6	46.2
Unknown	166	147	- 19	- 11.4
Total	505	470	- 35	- 6.9

Severity

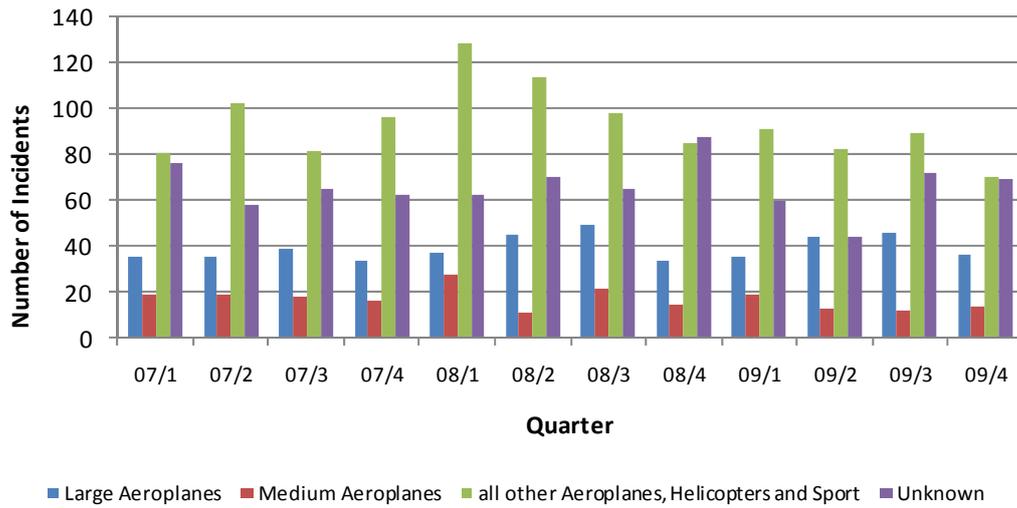
The following graphs show the severity of airspace incidents recorded over the period 1 January 2007 to 31 December 2009.



Major Airspace Incidents by Aircraft Type



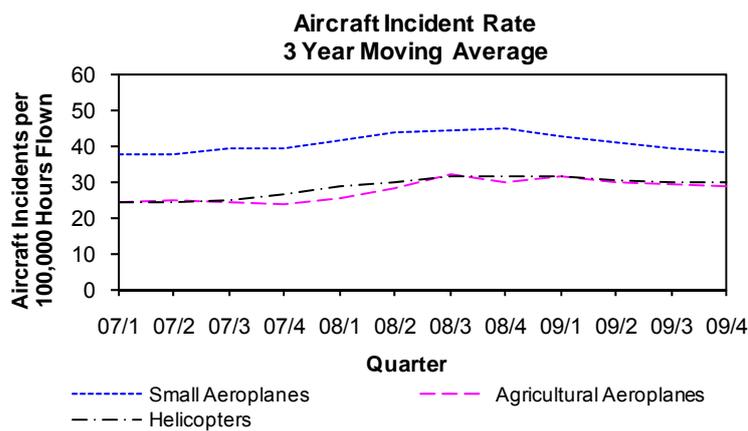
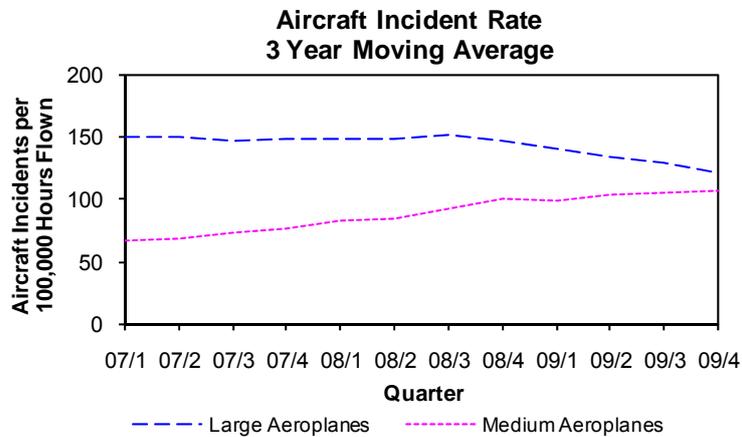
Minor Airspace Incidents by Aircraft Type



Aircraft Incidents

Occurrence Trend

The following graphs show the reported aircraft incident rates (incidents per 100,000 hours flown) three year moving average for the three-year period 1 January 2007 to 31 December 2009 (excluding Sport).



Aircraft Category	Straight line trend of 3 year moving average
Large Aeroplanes	Constant
Medium Aeroplanes	Trending up
Small Aeroplanes	Constant
Helicopters	Trending up
Ag Aeroplanes	Trending up

The ratios of reported aircraft incidents to reported accidents are much lower for the small aeroplanes, sport aircraft and helicopter groups than for the large, medium and agricultural aircraft groups.

Six-Monthly Comparison

Number of Reported Aircraft Incidents

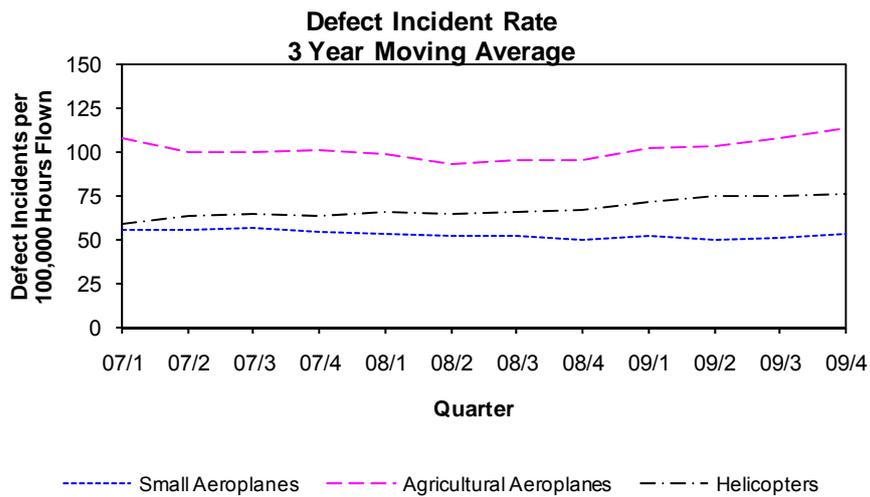
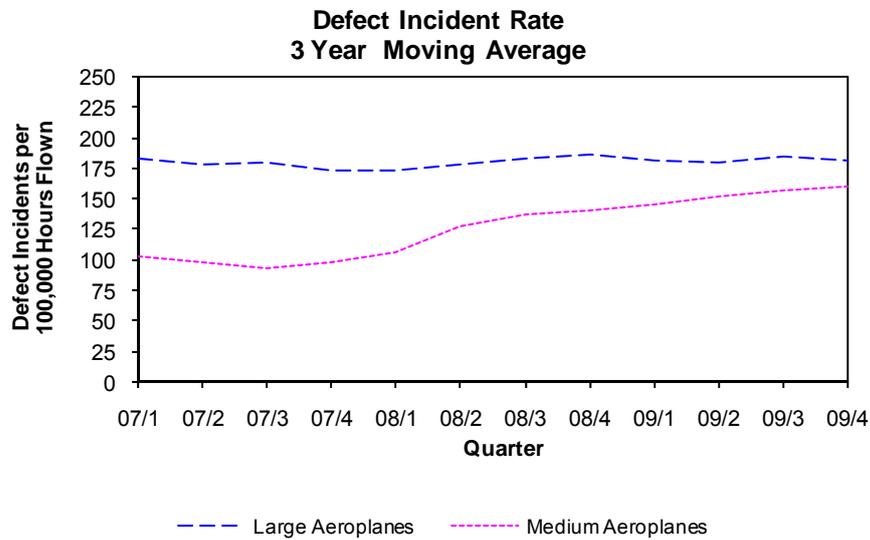
Aircraft Category	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change	
			Number	Percent
Large Aeroplanes	241	174	-67	- 27.8
Medium Aeroplanes	51	20	-31	- 60.8
Small Aeroplanes	69	42	-27	- 39.1
Agricultural Aeroplanes	7	1	-6	- 85.7
Helicopters	34	22	-12	- 35.3
Sport Aircraft	4	17	13	325.0
Unknown	105	79	-26	- 24.8
Total	511	355	-156	- 30.5

Severity

Activity	Severity	1 Jul to 31 Dec 2008	1 Jul to 31 Dec 2009	Change
	Major	28	13	-15
	Minor	212	160	-52
Medium Aeroplanes	Critical	0	0	0
	Major	5	3	-2
	Minor	46	17	-29
Small Aeroplanes	Critical	0	0	0
	Major	6	8	2
	Minor	63	34	-29
Helicopters	Critical	0	1	1
	Major	8	3	-5
	Minor	26	18	-8
Sport Aircraft	Critical	0	0	0
	Major	0	5	5
	Minor	4	12	8
Agricultural Aeroplanes	Critical	0	0	0
	Major	0	0	0
	Minor	7	1	-6
Unknown	Critical	2	0	-2
	Major	15	11	-4
	Minor	88	68	-20
Total	Critical	3	2	-1
	Major	62	43	-19
	Minor	446	310	-136

Defect Incidents

The following graphs show the aircraft defect incident rates (incidents per 100,000 hours flown) three year moving average for the three-year period 1 January 2007 to 31 December 2009 (excluding Sport).



Aircraft Category	Straight line trend of 3 year moving average
Large Aeroplanes	Constant
Medium Aeroplanes	Trending up
Small Aeroplanes	Constant
Agricultural Aeroplanes	Constant
Helicopters	Trending up

Six-Monthly Comparison

Number of Defect Incidents

Aircraft Category	1 Jul to	1 Jul to	Change	
	31 Dec 2008	31 Dec 2009	Number	Percent
Large Aeroplanes	367	328	-39	- 10.6
Medium Aeroplanes	63	50	-13	- 20.6
Small Aeroplanes	65	101	36	55.4
Agricultural Aeroplanes	18	29	11	61.1
Helicopters	63	64	1	1.6
Sport Aircraft	6	15	9	150.0
Unknown	15	26	11	73.3
Total	597	613	16	2.7

Severity

Activity	Severity	1 Jul to	1 Jul to	Change
		31 Dec 2008	31 Dec 2009	
Large Aeroplanes	Critical	0	0	0
	Major	55	58	3
	Minor	312	270	-42
Medium Aeroplanes	Critical	0	0	0
	Major	8	3	-5
	Minor	55	47	-8
Small Aeroplanes	Critical	0	0	0
	Major	4	23	19
	Minor	61	78	17
Helicopters	Critical	0	0	0
	Major	12	9	-3
	Minor	51	55	4
Sport Aircraft	Critical	0	0	0
	Major	2	6	4
	Minor	4	9	5
Agricultural Aeroplanes	Critical	0	0	0
	Major	2	6	4
	Minor	16	23	7
Unknown	Critical	0	0	0
	Major	2	0	-2
	Minor	13	26	13
Total	Critical	0	0	0
	Major	85	105	20
	Minor	512	508	-4

Bird Incident Rates

The following table shows the 12-month moving average strike rates for identified aerodromes for each quarter of the three years ending 31 December 2009.

Aerodrome	07/1	07/2	07/3	07/4	08/1	08/2	08/3	08/4	09/1	09/2	09/3	09/4
Auckland	2.3	2.5	3.0	2.9	2.9	3.4	3.2	3.0	3.2	2.3	2.0	2.5
Christchurch	3.8	3.2	3.5	3.5	2.9	3.4	3.1	3.4	3.5	2.9	2.9	2.3
Dunedin	3.9	3.1	3.3	2.9	2.0	3.0	2.8	3.1	4.0	3.4	3.4	4.5
Gisborne	11.3	7.9	7.4	6.7	6.1	11.2	10.3	11.1	10.0	6.6	5.9	5.4
Hamilton	4.0	3.0	2.3	2.0	1.8	2.2	2.5	3.1	3.0	2.6	2.3	1.7
Invercargill	6.2	6.6	7.1	8.1	9.4	8.1	8.4	10.7	8.5	8.5	6.9	5.8
Napier	7.9	5.4	6.6	4.5	5.6	6.9	5.5	6.4	5.0	5.0	7.3	7.9
Nelson	3.4	2.9	2.7	1.9	1.6	2.2	2.5	2.1	2.5	2.1	1.8	1.7
New Plymouth	5.4	5.0	3.6	3.0	2.1	2.8	3.0	3.7	5.2	5.5	4.9	4.8
Ohakea	2.0	2.0	1.4	1.4	2.2	2.0	2.5	3.0	2.3	2.1	1.7	1.4
Palmerston North	4.2	4.0	3.5	3.0	3.1	3.1	3.0	3.0	3.7	5.0	5.3	6.0
Queenstown	2.4	3.5	3.3	3.9	3.7	3.8	3.6	2.2	2.9	2.2	2.5	2.6
Rotorua	7.4	7.7	7.9	7.1	6.1	5.2	4.7	4.0	4.4	5.4	5.7	6.3
Taupo	1.5	1.2	1.8	2.1	1.8	2.1	2.3	2.0	2.4	2.2	1.9	2.6
Tauranga	2.1	2.0	2.0	1.7	1.6	1.4	1.8	2.1	2.1	2.0	1.3	1.0
Wellington	1.6	1.5	1.7	1.2	1.2	1.5	1.7	2.0	2.1	1.9	1.8	1.4
Whenuapai	5.8	8.3	9.6	10.3	13.6	12.2	12.7	12.1	9.6	7.7	7.9	10.6
Woodbourne	6.6	6.6	6.4	6.6	4.1	4.1	3.5	3.1	3.3	3.3	3.3	3.3

Bird occurrence rates are measured monthly, quarterly or annually by aerodrome. This is achieved by querying the database for the number of strikes at aerodromes over a period of time summarising by month, quarter or year. The results of this query are then divided by the aircraft movements at each aerodrome and multiplied by 10,000 to achieve strikes per 10,000 aircraft movements. Aircraft movements at aerodromes are obtained from the ACNZ, and, where available, from individual airport companies.

CAA Actions

The CAA uses the following criteria for assessing actions to be taken with regard to identified trends in bird strike rates.

Bird strikes per 10,000 aircraft movements	Risk Category	Trending Down	Constant	Trending Up
≥ 0.0 and < 5.0	Low	Monitor	Monitor	Advise Aerodrome Operator
≥ 5.0 and < 10.0	Medium	Monitor	Advise Aerodrome Operator	Advise Aerodrome Operator, Request Rectification Action
≥ 10.0	High	Advise Aerodrome Operator	Advise Aerodrome Operator, Request Rectification Action	Advise Aerodrome Operator, Request Rectification Action

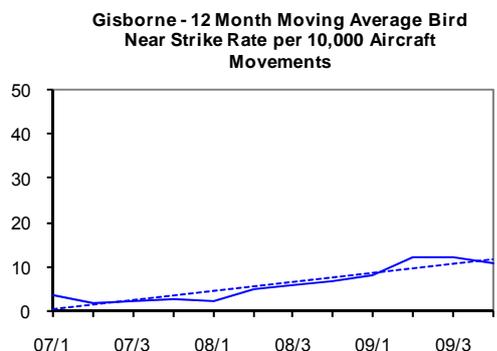
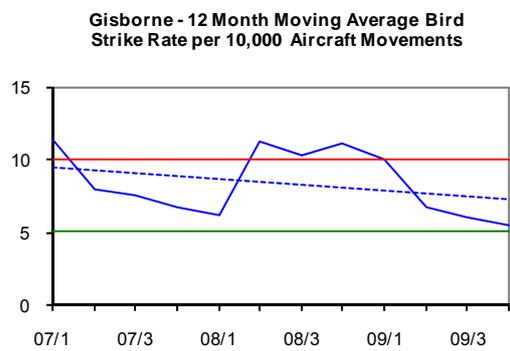
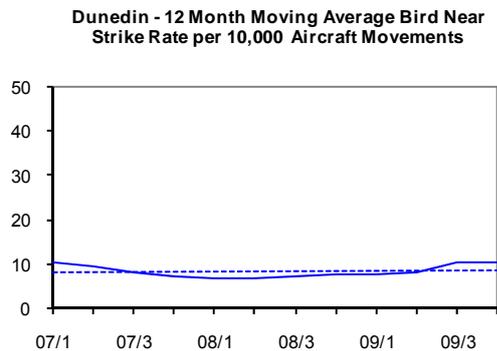
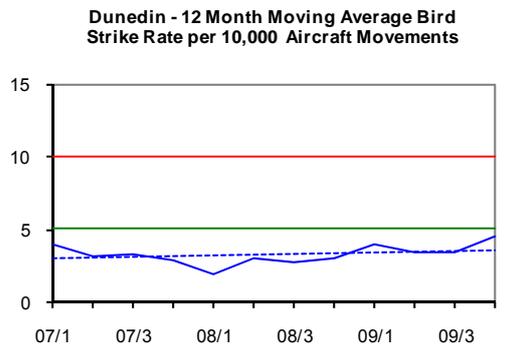
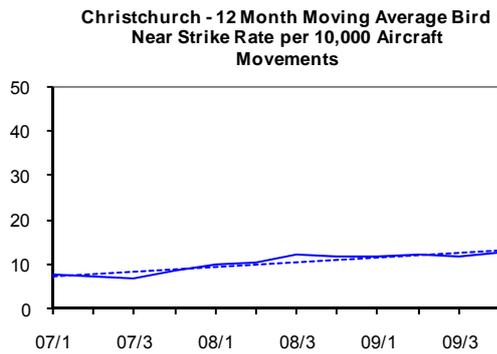
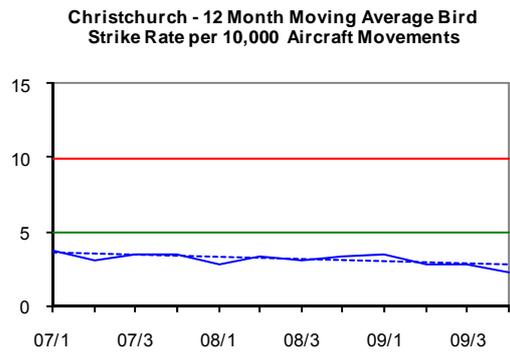
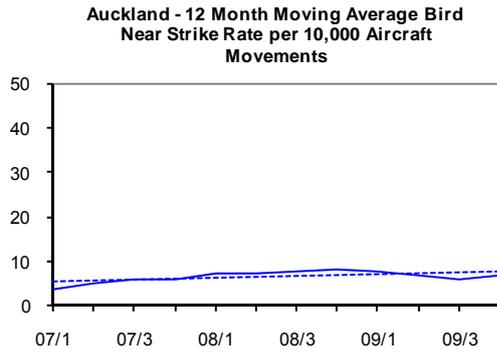
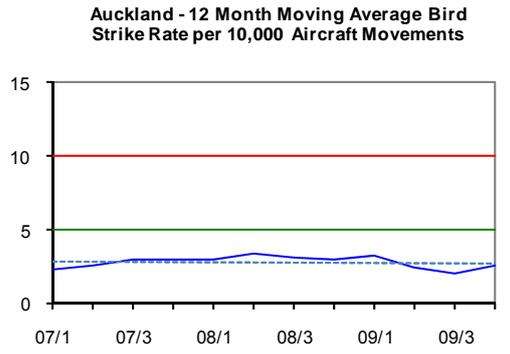
Analysis

Analysis shows that seven aerodromes have bird strike rates above the “trigger level” for CAA Action. Details were forwarded to Manager Aeronautical Services on 8 February 2010.

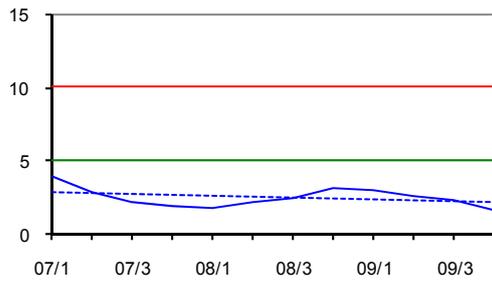
There was one aerodrome with a strike rate in the high risk category of the CAA standard (above 10.0 bird strikes per 10,000 aircraft movements). Five aerodromes had strike rates in the medium risk category (5.0 to 10.0 per 10,000 movements), one having a long-term upward trend, two having long-term constant trends and two having long-term downward trends. Twelve aerodromes had strike rates in the low risk category (below 5.0 per 10,000 movements) three having long-term upward trends, four having long term constant trends and five having long term downward trends.

The top line on the strike rate graphs that follow shows the High risk category. The next line shows the Medium risk category.

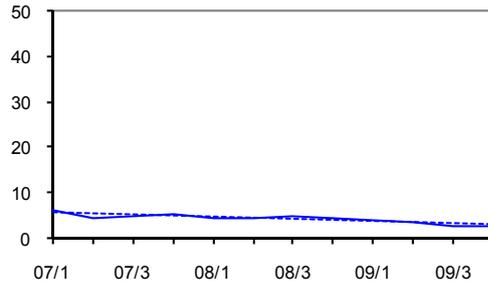
Aerodrome	Risk Category	Trend	CAA Action
Auckland	Low	Constant	Monitor
Christchurch	Low	Trending down	Monitor
Dunedin	Low	Trending up	Advise Aerodrome Operator
Gisborne	Medium	Trending down	Monitor
Hamilton	Low	Trending down	Monitor
Invercargill	Medium	Constant	Advise Aerodrome Operator
Napier	Medium	Constant	Advise Aerodrome Operator
Nelson	Low	Trending down	Monitor
New Plymouth	Low	Trending up	Advise Aerodrome Operator
Ohakea	Low	Constant	Monitor
Palmerston North	Medium	Trending up	Advise Aerodrome Operator, Request Rectification Action
Queenstown	Low	Trending down	Monitor
Rotorua	Medium	Trending down	Monitor
Taupo	Low	Trending up	Advise Aerodrome Operator
Tauranga	Low	Constant	Monitor
Wellington	Low	Constant	Monitor
Whenuapai	High	Trending up	Advise Aerodrome Operator, Request Rectification Action
Woodbourne	Low	Trending down	Monitor



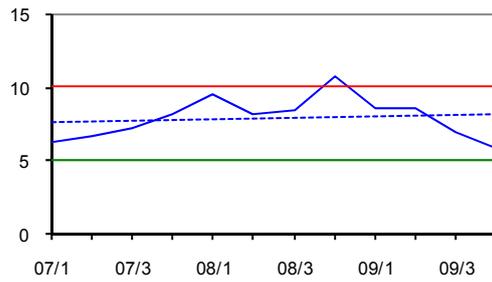
Hamilton - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



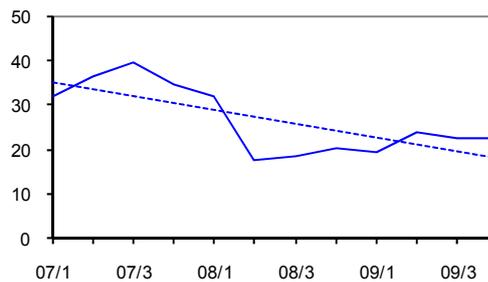
Hamilton - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



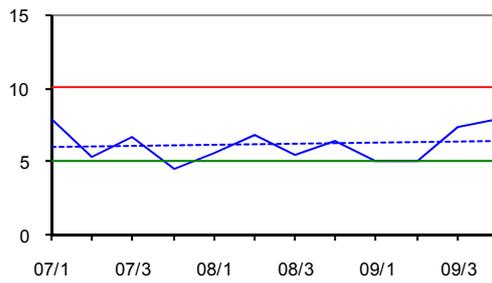
Invercargill - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



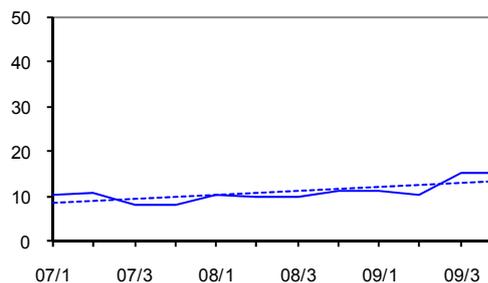
Invercargill - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



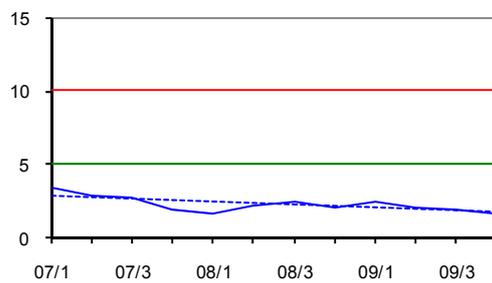
Napier - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



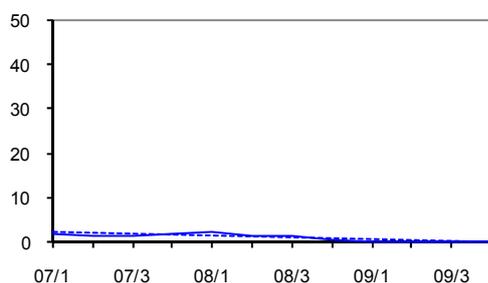
Napier - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



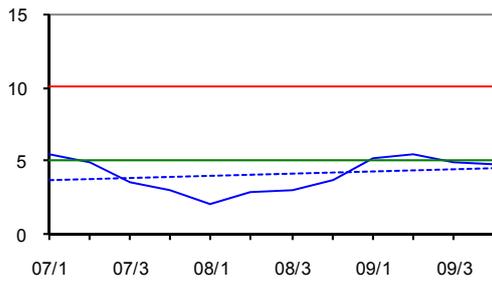
Nelson - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



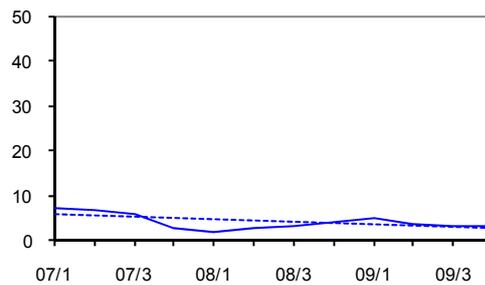
Nelson - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



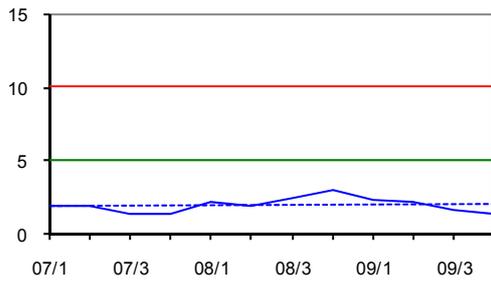
New Plymouth - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



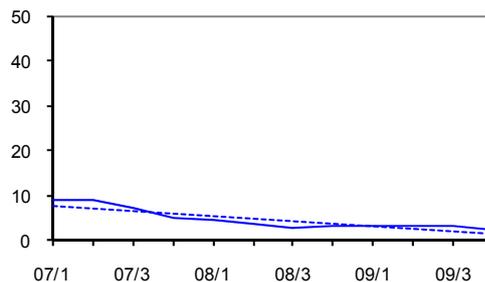
New Plymouth - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



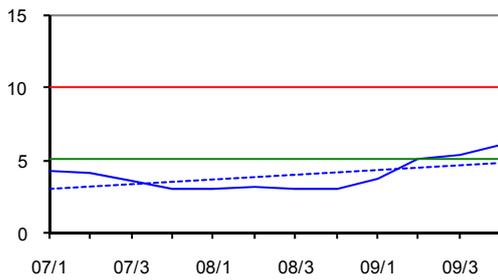
Ohakea - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



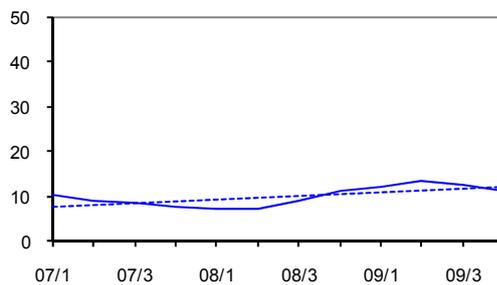
Ohakea - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



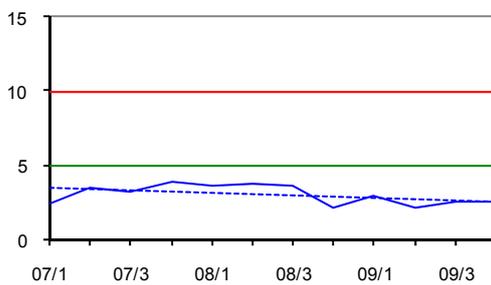
Palmerston North - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



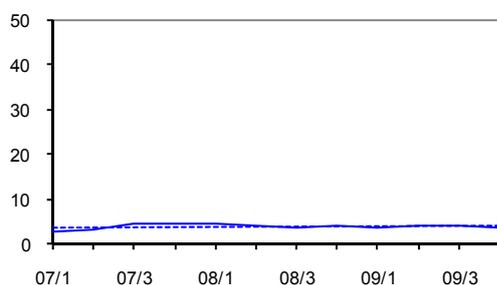
Palmerston North - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



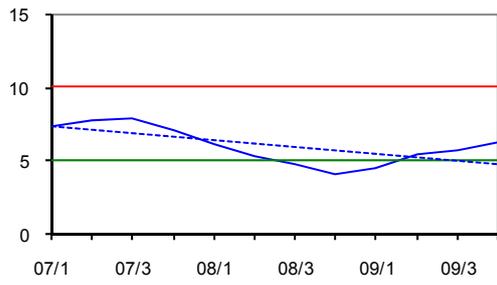
Queenstown - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



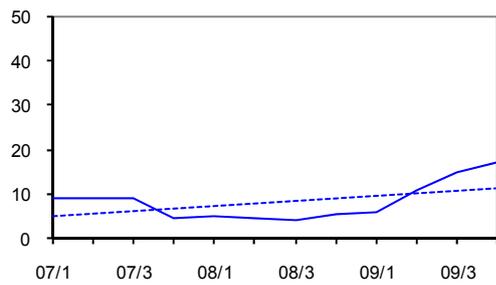
Queenstown - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



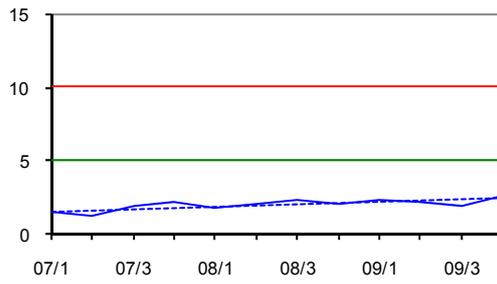
Rotorua - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



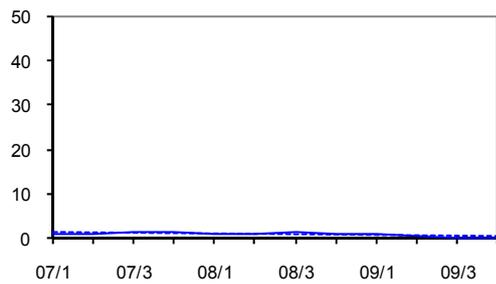
Rotorua - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



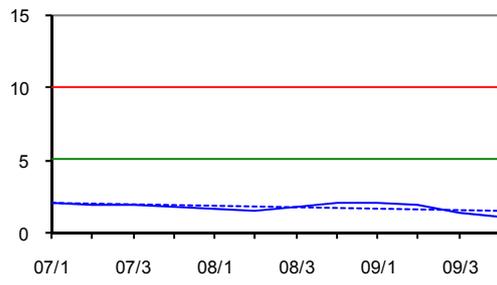
Taupo - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



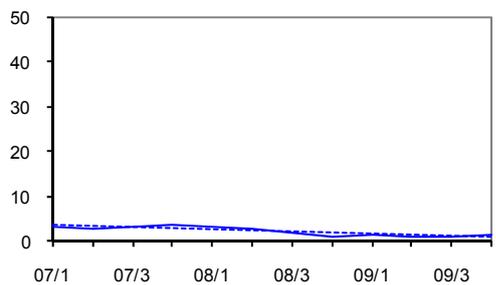
Taupo - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



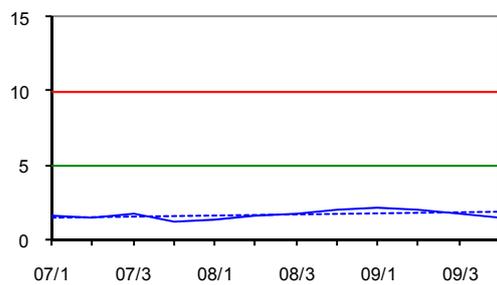
Tauranga - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



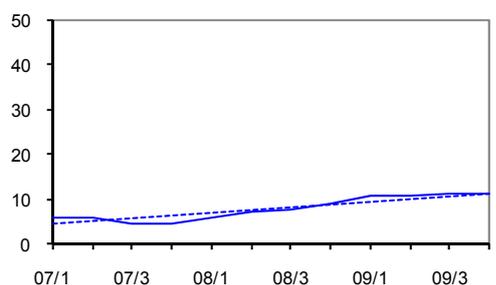
Tauranga - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



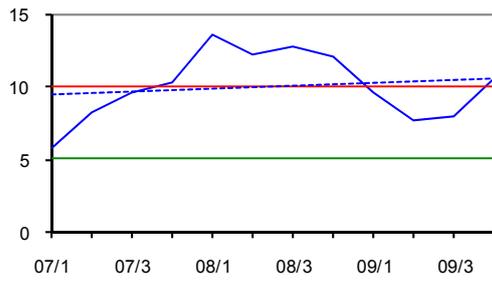
Wellington - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



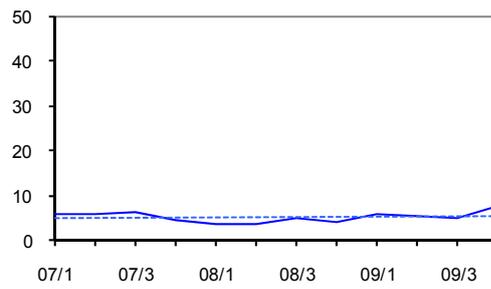
Wellington - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



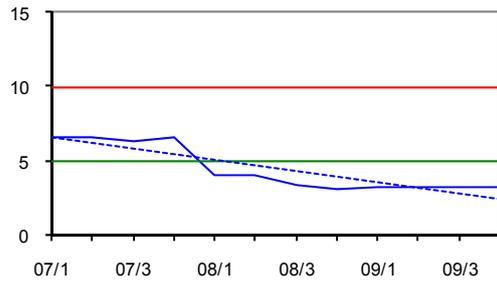
Whenuapai - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



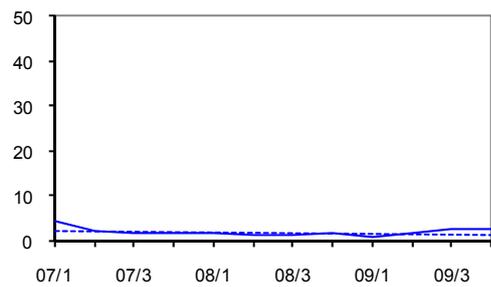
Whenuapai - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



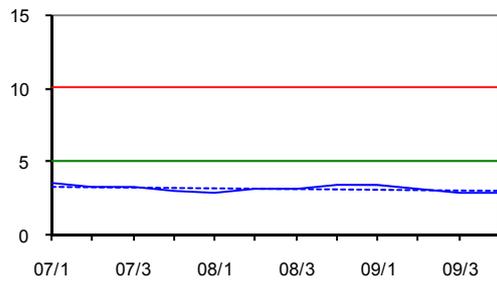
Woodbourne - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



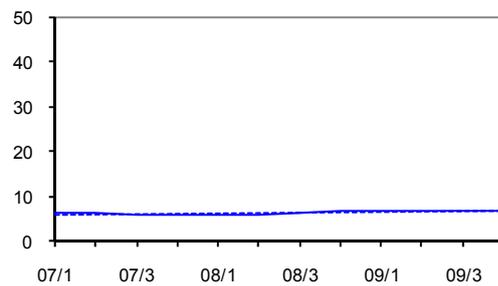
Woodbourne - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



Overall - 12 Month Moving Average Bird Strike Rate per 10,000 Aircraft Movements



Overall - 12 Month Moving Average Bird Near Strike Rate per 10,000 Aircraft Movements



Security Incidents

Six-Monthly Comparison

Number of Security Incidents

Aircraft Category	1 Jul to	1 Jul to	Change	
	31 Dec 2008	31 Dec 2009	Number	Percent
Large Aeroplanes	13	4	- 9	- 69.2
Medium Aeroplanes	5	0	- 5	- 100.0
Small Aeroplanes	0	0	0	-
Agricultural Aeroplanes	0	0	0	-
Helicopters	0	0	0	-
Sport Aircraft	0	0	0	-
Unknown	22	29	7	31.8
Total	40	33	- 7	- 17.5

Severity

Severity	1 Jul to	1 Jul to	Change	
	31 Dec 2008	31 Dec 2009	Number	Percent
Critical	0	0	0	-
Major	2	3	1	50.0
Minor	38	30	-8	- 21.1
Total	40	33	-7	- 17.5

Occurrences — General

The following table shows the number of occurrences (excluding Non Reportable Occurrences) that were registered on the CAA database during each of the six months of the reporting period.

Month	ACC	ADI	ARC	ASP	BRD	CSI	DEF	DGD	HGA	INC	NIO	PAA	PIO	SEC
Jul-09	7	15	35	89	94		124	6	1	62	4		2	6
Aug-09	3	4	38	83	87		119	8	1	49	1		1	12
Sep-09	9	9	31	69	105		98	10	2	51	2	1	1	2
Oct-09	9	7	29	83	119		87	8	2	67	6	1	2	2
Nov-09	11	10	33	68	98	1	96	11		57	6	1	2	8
Dec-09	9	13	28	70	73		93	9	3	61	2	1	5	3
Total	48	58	194	462	576	1	617	52	9	347	21	4	13	33

ACC	Accident	DGD	Dangerous Goods Incident
ADI	Aerodrome Incident	HGA	Hang Glider Accident
ARC	Aviation Related Concern	INC	Aircraft Incident
ASP	Airspace Incident	NIO	Facility Malfunction Incident
CSI	Cargo Security Incident	PAA	Parachute Accident
BRD	Bird Incident	PIO	Promulgated Information Incident
DEF	Defect Incident	SEC	Security Incident

Definitions

General

Accident [ACC] — means an occurrence that is associated with the operation of an aircraft and takes place between the time any person boards the aircraft with the intention of flight and such time as all such persons have disembarked and the engine or any propellers or rotors come to rest, being an occurrence in which—

- (1) a person is fatally or seriously injured as a result of—
 - (i) being in the aircraft; or
 - (ii) direct contact with any part of the aircraft, including any part that has become detached from the aircraft; or
 - (iii) direct exposure to jet blast—
except when the injuries are self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to passengers and crew; or
- (2) the aircraft sustains damage or structural failure that—
 - (i) adversely affects the structural strength, performance or flight characteristics of the aircraft; and
 - (ii) would normally require major repair or replacement of the affected component—
except engine failure or damage that is limited to the engine, its cowlings, or accessories, or damage limited to propellers, wing tips, antennas, tyres, brakes, fairings, small dents, or puncture holes in the aircraft skin; or
- (3) the aircraft is missing or is completely inaccessible.

Aerodrome incident [ADI] — means an incident involving an aircraft operation and—

- (1) an obstruction either on the aerodrome operational area or protruding into the aerodrome obstacle limitation surfaces; or
- (2) a defective visual aid; or
- (3) a defective surface of a manoeuvring area; or
- (4) any other defective aerodrome facility.

Aircraft incident [INC] — means any incident, not otherwise classified, associated with the operation of an aircraft.

Airspace incident [ASP] — means an incident involving deviation from, or shortcomings of, the procedures or rules for—

- (1) avoiding a collision between aircraft; or
- (2) avoiding a collision between aircraft and other obstacles when an aircraft is being provided with an Air Traffic Service.

Bird incident [BRD] — means an incident where—

- (1) there is a collision between an aircraft and one or more birds; or
- (2) when one or more birds pass sufficiently close to an aircraft in flight to cause alarm to the pilot.

Cargo security incident [CSI] — means an incident involving cargo or mail that is carried, or has been accepted by a regulated air cargo agent or an air operator for carriage, by air on an aircraft conducting an international regular air transport operation passenger service, and—

- (1) there is evidence of tampering or suspected tampering with the cargo or mail which could be an act or an attempted act of unlawful interference; or
- (2) a weapon, explosive, or other dangerous device, article or substance, that may be used to commit an act of unlawful interference is detected in the cargo or mail.

Dangerous goods incident [DGD] — means an incident associated with and related to the carriage of dangerous goods by air after acceptance by the operator, that—

- (1) results in injury to a person, property damage, fire, breakage, spillage, leakage of fluid or radiation, or other evidence that the integrity of the packaging has not been maintained; or
- (2) involves dangerous goods incorrectly declared, packaged, labelled, marked, or documented.

Defect incident [DEF] — means an incident that involves failure or malfunction of an aircraft or aircraft component, whether found in flight or on the ground.

Facility malfunction incident [NIO] — means an incident that involves an aeronautical facility.

Fatal Injury — means any injury which results in death within 30 days of the accident.

Incident — means any occurrence, other than an accident, that is associated with the operation of an aircraft and affects or could affect the safety of operation. Note: Incident has many sub-categories.

Occurrence — means an accident or incident.

Promulgated information incident [PIO] — means an incident that involves significantly incorrect, inadequate, or misleading information or aeronautical data promulgated in an aeronautical information publication, map, chart, or otherwise provided for the operation of an aircraft.

Security incident [SEC] — means an incident that involves unlawful interference.

Serious Injury — means any injury that is sustained by a person in an accident and that—

- (1) requires hospitalisation for more than 48 hours, commencing within 7 days from the date the injury was received; or
- (2) results in a fracture of any bone, except simple fractures of fingers, toes, or nose; or
- (3) involves lacerations which cause severe haemorrhage, nerve, muscle, or tendon damage; or
- (4) involves injury to an internal organ; or
- (5) involves second or third degree burns, or any burns affecting more than 5% of the body surface; or
- (6) involves verified exposure to infectious substances or injurious radiation.

Severity

The following definitions apply to the severity accorded to occurrences and to findings as the result of investigation of occurrences.

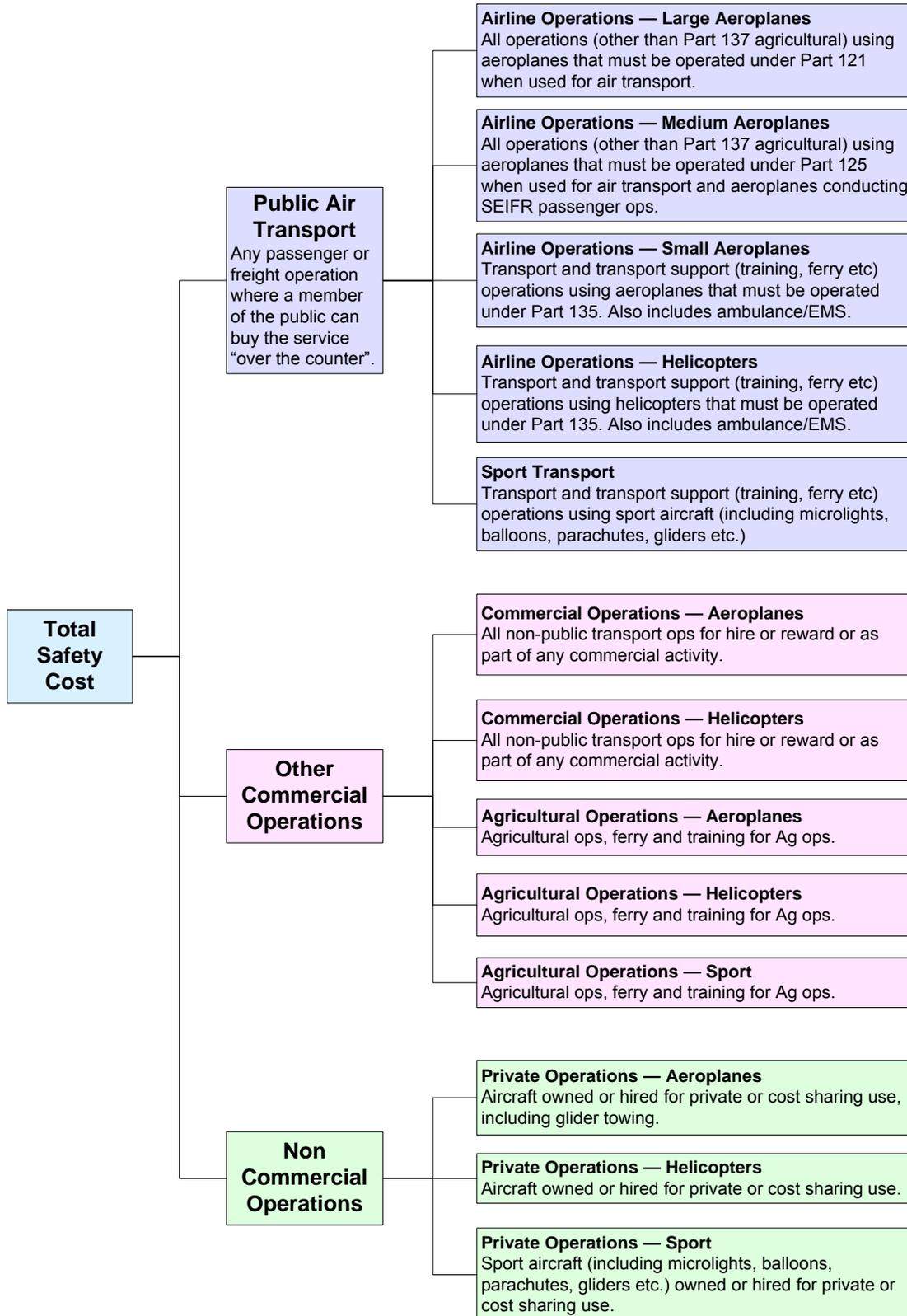
Severity Factor		Definition
CR	Critical	An occurrence or deficiency that caused, or on its own had the potential to cause, loss of life or limb;
MA	Major	An occurrence or deficiency involving a major system that caused, or had the potential to cause, significant problems to the function or effectiveness of that system;
MI	Minor	An isolated occurrence or deficiency not indicative of a significant system problem.

Aircraft Statistics Category

The following table shows the definition of each aircraft statistics category and the aircraft classes included.

Aircraft Statistics Category	Definition	Aircraft Class
Large Aeroplanes	Aeroplanes that must be operated under Part 121 when used for air transport	Aeroplane
Medium Aeroplanes	Aeroplanes that must be operated under Part 125 when used for air transport, except for those required to operate under Part 125 solely due to operating SEIFR	Aeroplane
Small Aeroplanes	Other Aeroplanes with Standard Category Certificates of Airworthiness	Aeroplane
Agricultural Aeroplanes	Aeroplanes with Restricted Category Certificates of Airworthiness limited to agricultural operations	Aeroplane
Helicopters	Helicopters with Standard or Restricted Category Certificates of Airworthiness	Helicopter
Sport Aircraft	All aircraft not included in the groups above	Aeroplane, Amateur Built Aeroplane, Amateur Built Glider, Amateur Built Helicopter, Balloon, Glider, Gyroplane, Helicopter, Microlight Class 1, Microlight Class 2, Power Glider

Safety Target Structure



Safety Target Groups

Target group name	General description	Includes	Excludes
Airline Operation - Large Aeroplanes	All operations using large passenger and freight aeroplanes that are operated under part 121	Ferry, test, training, passenger and freight, domestic and international, Part 91 operations, and commercial operations other than Part 137 agricultural operations. Includes all aeroplanes that have a passenger seating configuration of 30 seats or more, or a payload capacity of more than 3410kg.	Part 137 agricultural operations
Airline Operation - Medium aeroplanes	All operations using medium passenger and freight aeroplanes that are operated under part 125.	Ferry, test, training, passenger and freight, domestic and international, Part 91 operations, and commercial operations other than Part 137 agricultural operations. Aeroplanes that have a seating configuration of 10 to 30 seats, excluding any required crew member seats, or a payload capacity of 3410 kg or less and a MCTOW of greater than 5700 kg, and any aeroplanes conducting SEIFR passenger operations.	Part 137 agricultural operations
Airline Operation - Small aeroplanes	All operations by 119 certificate holders using other aeroplanes.	Ferry, test, passenger and freight, domestic and international, training in support of Part 135 operations, Ambulance/EMS	Part 137 agricultural operations, Part 91 operations, and commercial operations. SEIFR under Part 125
Airline Operation - Helicopters	All operations by 119 certificate holders using helicopters	Ferry, test, passenger and freight, domestic and international, training in support of Part 135 operations, Ambulance/EMS	Part 137 agricultural operations, Part 91 operations, and commercial operations. SEIFR under Part 125
Commercial Operations - Aeroplane	Other commercial operations Aeroplane (all non-public transport ops for hire or reward or as part of any commercial activity)	Positioning, ferrying flights, training (dual and solo), "Commercial non-certified", Business and Executive	Public transport ops, Agricultural ops & training for Agricultural ops, non-commercial ops
Commercial Operations - Helicopter	Other commercial operations Helicopter (all non-public transport ops for hire or reward or as part of any commercial activity)	Positioning, ferrying flights, training (dual and solo), "Commercial non-certified", Business and Executive	Agricultural ops & training for Agricultural ops, public transport, non-commercial ops.
Agricultural Operations - Aeroplane	Agricultural operations using aeroplanes	Agricultural ops, ferry & training for Ag ops.	Everything else.
Agricultural Operations - Helicopters	Agricultural operations using helicopters	Agricultural ops, ferry & training for Ag ops.	Everything else
Agricultural Operations - Sport Aircraft	Agricultural operations using sport aircraft	Agricultural ops, ferry & training for Ag ops.	Everything else
Private Aeroplane	Private operations in aeroplanes	Cost sharing, aircraft hired from schools and clubs for private or cost sharing use, glider towing	Airline, commercial, agricultural operations, sport aircraft, balloons, training (dual and solo)
Private Helicopter	Private operations in helicopters	Cost sharing, aircraft hired from schools and clubs for private or cost sharing use	Airline, commercial, agricultural operations, sport aircraft, balloons, training, ferry/positioning flights by commercial operators
Sport Transport	All public transport ops by sport aircraft	Ferry, test, passenger and freight, domestic and international, training for such ops. And balloons	Agricultural operations.
Sport Private	Private operations using sport aircraft	Cost sharing, aircraft hired from schools and clubs for private or cost sharing use, training, gliders, power gliders, hang gliders, parachutes and all forms of inflatable wing, balloons	Airline, commercial, agricultural operations, and training for these activities